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PROGRESSIVE TRENDS IN PSYCHIATRIC THOUGHT

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Psychiatry is on the march and it is fitting, in 'World Mental Health Year 1960', that a serious attempt should be made to determine the direction of its progress. It may well be that the next great advance will come, not in the form of further discoveries in the treatment of specific diseases, but, as Thomson[1] said, from a study of the precise relation of medical practice to society.

The trends in psychiatric thought in the world today are not easy to assess because of the many schools and the diversity of outlook. It should be remembered that psychiatry is a social as well as a biological science and that it will always be influenced by the cultural setting in which it has developed. Moreover, the volume of literature published since the second world war has added to the confusion and made it difficult to obtain a clear picture of the contemporary scene.

THE UNITED STATES

It has always been difficult to determine the trends of thought which are truly representative of American psychiatry. For this reason the recent publication of the *American Handbook of Psychiatry*[2] is both welcome and timely, and the editors are to be congratulated on the thoroughness and objectivity with which they have carried out their onerous task.

For many years the field of psychiatry in America had been divided into two main schools of thought, the organic and the psychobiological. The first school reduced psychic phenomena to organic causes, and the second, represented by Adolf Meyer, emphasized the importance of environment as well as biological factors in the causation of mental disturbances.

Late in the third decade of the present century the initial trend towards a better integration of psychiatry into the social structure of American culture became evident. The administration and the training of the personnel of mental hospitals rapidly improved and, as a result of a vigorous programme of after-care and rehabilitation, the institutions themselves were readily accepted by the community. Research also entered a new phase with the development of psychosomatic medicine, the introduction of the newer methods of physical treatment, including psychopharmacology and electro-encephalography. Clinical research was also stimulated in the fields of mental deficiency, child psychiatry, industrial psychiatry, military psychiatry, space psychiatry, criminology, alcoholism and geriatrics.

After the second world war the basic principles of mental hygiene were firmly established, including extensive programmes for the prevention of mental illness and the rehabilitation of veterans. Finally, the Federal Government officially recognized the importance of training a sufficient number of psychiatrists to meet the growing needs of the community.

WESTERN EUROPE

Science cannot be limited by geographical or political boundaries. But psychiatry, as a branch of medicine, is an art as well as a science. It is not surprising, therefore, to find that the philosophic approach of psychiatrists to personality problems differed on the Continent from that of their colleagues practising in Britain and America.

On the Continent psychiatrists have been nurtured in the intellectual traditions of Leibnitz and Descartes, whereas in Britain and America they have been dominated by the empiricism of Locke. Continental theories tend to focus on the 'whole' man whilst Anglo-American concepts, by contrast, are more often concerned with traits, attitudes, syndromes and performance. Speaking generally it may be said that the Anglo-American approach is more concerned with social relationships and expresses itself in an optimistic and vigorous positivism.

The emphasis in European psychiatry, however, is still focused on diagnostic categories. In Germany this trend follows the Kraepelinian tradition and the pathology of the last century. In France a similar approach is found based on the brilliant clinical school of descriptive medicine of the same period. In the Scandinavian countries the emphasis is on genetics and constitutional classifications, with greater attention to detailed statistics.

In Europe, as distinct from Britain, psychiatrists still speak of mental diseases, whereas in Britain and America they usually speak of 'reactive states', a concept which implies a more dynamic approach and a greater consideration for the individual.

In Britain and America today the principles of the psychodynamic school are fairly generally accepted. On the Continent, on the other hand, a variety of approaches is found—phenomenological and existential psychiatry, logotherapy and the conditioned reflex therapy of the Russian school.

THE SOVIET UNION

With the recent increase in cultural and scientific exchange between Russia and the Western World, there has occurred a corresponding interest in Soviet psychiatry. Wortis[3] said early in his book that Soviet psychiatry could best be understood if it were related to three basic sources of influence: its socialistic setting in a broad framework of public health services; its conformity with the general principles of dialectical materialism; and the teaching of Pavlov.

Lebensohn[4], after his recent visit to Moscow and Leningrad, confirmed these observations and said that the Soviet approach to psychiatry was ultra-conservative. To cite only one example: the two treatments which lie at extreme opposite poles in American psychiatry, namely prefrontal lobotomy

and psychoanalysis, were either officially banned or unofficially condemned, leaving only the large middle ground, with its emphasis on physiology.

Soviet psychiatry, unlike European psychiatry, is not 'hospital orientated'. There is much more emphasis on out-patient treatment and prophylaxis than on hospital-building programmes, and the average Soviet psychiatrist is more 'research minded' than his American counterpart.

BRITAIN

The unity of British and American psychiatry began in 1927 with the publication of Henderson and Gillespie's textbook,[5] which was not a full exposition of the psychobiological doctrine of Adolf Meyer, but reflected a dynamic approach to psychiatric case-taking and treatment.

The acceptance of this essentially dynamic viewpoint, as Roger[6] said, created a soil more favourable to psychoanalysis than to phenomenology. It is against this background that the significance of the publication of a textbook, *Clinical Psychiatry* by Mayer-Gross *et al.*[7] in 1954, should be judged. Although the book puzzled American reviewers, who saw it as a retrogressive trend in psychiatry, there are many psychiatrists in Britain and elsewhere who regard it as a salutary return to careful clinical appraisal on a symptomatological level.

The general psychiatric trend in Britain today is perhaps indicated by the approach of the mental hospital psychiatrists. In the selection of their cases for physical treatment their approach is phenomenological, whereas in their out-patient treatment of the psychoneuroses they are interested in psychoanalysis.

Under the National Health Service in Britain it has been recommended that part-time appointments of all grades be made to the mental hospitals. It is felt that this will attract doctors with keen clinical and research interests to the mental hospital service and establish close associations with the general hospitals. Thus strengthened, it is anticipated that the mental hospital service will undertake diverse extramural activities which will include comprehensive out-patient services, child psychiatry, and industrial forensic and criminal psychiatry.

The social rehabilitation unit established by Maxwell Jones[8] at Belmont in Sussex is of particular interest. The patients consist of the misfits in industry and are admitted from the employment exchanges, but others are referred by psychiatrists and by the courts. Their stay in hospital is up to a period of 12 months. It is stated that in this atmosphere of group endeavour the psychopath develops concern about his antisocial behaviour and, as his feelings of guilt increase, begins to identify himself with the aims of the unit.

Roger[9] has remarked on the increased attention which is being given to recreation and occupational activities in hospitals and pointed out that at Banstead Mental Hospital a Medical Research Council team has been supervising an experiment to create a factory within the hospital providing paid employment for patients. According to the first reports, the results are encouraging. Carse and his co-workers[10] described a district mental hospital service which provided out-patient and domiciliary treatment for the South Coast town of Worthing. The effect of this pilot experimental service has so reduced the number of admissions to the neighbouring mental hospital that the writers believe that the present problem of overcrowding would be completely resolved if similar services were provided in the rest of the mental-hospital 'catchment area'. Perhaps this is why Quarido's experiments[11] in the domiciliary care of psychiatric patients in Amsterdam are being followed with such interest.

McKeown[12] recently made a study of the whole hospital population, except mental defectives, in the Birmingham area. He suggested that, in future, differentiation between the actual symptoms of illness should be ignored, and that patients who needed hospital care should be grouped in one hospital centre with four divisions. The first should have all the facilities of a hospital, with surgical, medical and skilled nursing care; the second should be for those patients who chiefly require simple nursing without medical supervision; the third should be for those who need limited facilities but some degree of supervision or simple nursing because of their mental state; and the fourth should be for those who must remain in hospital, chiefly for social reasons—these would mainly be geriatric, psychiatric and arthritic patients.

This plan would obviate the present difficulties of obtaining adequate medical and nursing staff for long-term chronic patients, whether physical, psychiatric or geriatric, since the staff would rotate between long-stay and acute patients. It would centralize both surgical and laboratory facilities. If the number of patients in one division of the hospital diminished, the buildings would be available for other purposes. This scheme would also simplify the organization of professional education and encourage research in psychiatry and many other neglected fields of medicine.

SOUTH AFRICA

Psychiatry in South Africa is in a state of active transition. In 1956 a Faculty of Neurology and Psychiatry was established within the College of Physicians, Surgeons and Gynaecologists of South Africa and the first travelling Fellowship in Psychiatric Medicine has been awarded for 1960. A scholarship valued at £500 has also been offered to assist a suitable postgraduate student to prepare for the higher qualification of Fellow of the College of Physicians with psychiatry as an additional special subject. In 1959 the first full-time Professor of Psychiatry was appointed to the University of the Witwatersrand in Johannesburg, and it is anticipated that similar chairs will soon be established at the other medical schools.

The South African Medical and Dental Council, which is a statutory body in this country, has recommended that psychiatry should be better integrated into the undergraduate medical curriculum and that a mental health service should be established in the Union of South Africa.

It is now generally agreed that the mental hospitals should retain their key position in the proposed mental health service, and that they should, wherever possible, be raised to the status of teaching hospitals with university affiliation. The mental health service[13, 14] should be organized on a regional basis around the mental hospitals and the medical schools. The importance of specialized mental hospitals will in no way interfere with the growing facilities provided by the general hospitals for the treatment of mental illness, which has done so much to make, not only the public, but also medical and nursing students and even the doctors aware of psychiatry as an essential branch of medicine.

It is anticipated that the present overcrowding in our mental hospitals, as elsewhere in the world, will be reduced by the establishment of early treatment centres, run on similar lines

to the Antwerp[15] and Worthing[16] experiments. These centres are likely to be gradually established throughout the Union in the 'catchment areas' of the mental hospitals, and will provide a small number of beds, a day hospital out-patient service, and full facilities for domiciliary treatment.

Consideration is also being given to the establishment of institutes of psychiatry in Johannesburg, Cape Town and Durban. These institutes will be part of the mental hospital service and, with the assistance of the universities and the College, they will provide the necessary teaching facilities for the psychiatric training of doctors, nurses and auxiliary workers, including public health nurses and probation officers.

The psychopathic hospital which I have discussed elsewhere[17] has also been approved in principle and will be established as soon as the necessary funds are available. This will do much to resolve the social problem created by the criminal psychopath and provide an opportunity for research into the problem of offenders who do not respond to the ordinary methods of correction.

It is anticipated, too, that regional medical officers of mental health will be appointed under the Commissioner for Mental Hygiene to work outside the mental hospitals and to coordinate the services of other government departments and the numerous voluntary organizations at present independently concerned with various aspects of mental health.

Medical education in South Africa is undergoing radical changes and there is a steady recognition that humane medicine must be taught. Better integration of psychiatry into the undergraduate medical curriculum will do something to restore the physician-patient relationship which is the key to every health activity and the basis of the art of healing. For, as Rees[18] has said, just as most general medical and surgical procedures are carried out by family doctors, the specialists dealing mainly with the rarer and more serious conditions, so with the development of psychiatric insights; the major responsibility for applying them, both for prevention and treatment, will in the future rest with the family doctor and the public health nurse.

It would be a catastrophe, however, if the establishment of a mental health service were to create the feeling in the minds of general practitioners that mental illness is the responsibility of others. The practitioner is the man who first sees the sick person and knows his environment; therefore the psychiatrically-minded general practitioner will remain the mainstay in the fight for mental health.

CONCLUSION

Looking back into the past we see, as Blacker[19] said, that institutional psychiatry developed as a segregated speciality cut off from general medicine. The diagnosis and treatment of neurosis developed as an offshoot of neurology. Child guidance began as an independent movement, insufficiently linked to general medicine and paediatrics and little related to institutional psychiatry. Testing procedures and vocational guidance have been partly derived from non-medical psychology. It is now vital that these various approaches to the problem of increasing mental ill-health should be integrated into general medicine and combined into a multi-disciplined mental health service.

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THOUGHTS ON THE PLANNING OF MENTAL HEALTH SERVICES FOR SOUTH AFRICA

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There have been great advances in psychiatry during the past 30 years. Better facilities for care, modern methods of treatment (both psychological and physical), and the transition from custodial care to a therapeutic approach have revolutionized psychiatry. In many countries there is a tendency to arrange for the care of the mentally ill in the community rather than in large isolated hospitals. There is an increasing emphasis on prevention and early detection of mental illness; on early-treatment centres situated in the community, on after-care and rehabilitation and the maintenance of the chronic patient in the community, on day and night hospitals, and on domiciliary services. These developments are proving of economic and therapeutic advantage.

South Africa faces special mental health problems in its multi-racial and multi-cultural community. The complexity of these problems is heightened by urbanization of the non-White races in a time of changing values—especially by the effects of urbanization on tribal laws, customs and taboos.

Matters are further complicated by the shortage of trained personnel and by the size of the country—the uneven distribution of its population and the lack of any psychiatric services over vast areas, such as from Kimberley to the South West Coast and from the Cape Peninsula to the borders of Angola.

These are some of the features which call for a review of the country's mental health services, for bringing them into line with present-day needs, and for coordinated planning for the future, allowing for flexibility and adaptation to changing needs.

PRESENT SERVICES

Over 20,000 cases of mentally disordered patients are treated annually in the mental hospitals of the Union. It is estimated that there are 100,000 mental defectives in South Africa. At the Johannesburg General Hospital alone over 8,000 attendances are registered annually at the psychiatric out-patient clinics. Ten mental health societies have a patient attendance of some 8,000 *per annum*.

These figures only partially reflect the incidence and range of mental ill-health in the country. The actual size of the problem is infinitely greater and its cost to the State is enormous.

MENTAL HOSPITAL SERVICES

On 31 December 1957 the rated bed-capacity of the 13 mental hospitals in the Union for White and non-White mentally disordered and mentally defective patients was 14,943 for 18,561 patients.[8]

There is an acute shortage of doctors and nurses which handicaps the work of the mental hospitals. Early admittance of patients is difficult because of the inadequacy of available accommodation.[8] The heavy load of chronic patients in the hospitals intensifies the difficulties. The shortage of mental hospital accommodation for non-Whites is more acute than for Whites.

During the past 10 years there has been a change from custodial to therapeutic care. Many mental illnesses in which the prognosis was previously thought to be unfavourable show a marked improvement as a result of new methods of treatment, and a large number of patients are able to return to their homes and work. Even some chronic patients are being brought to a level of social recovery and are able to leave hospital, or are enabled to live more useful lives in hospital.

Despite the shortage of accommodation the admittance rate has, in recent years, increased and in some hospitals the discharge rate of new cases has increased to 70%.[8]

The voluntary-admittance rate is low compared to that obtaining in some places where the trend is for 80 - 90% of patients to be admitted on a voluntary basis.

This apparent lack of confidence in mental hospitals may, in some measure, be ascribed not only to the lack of public enlightenment concerning mental illness and the work done in mental hospitals, but also to little awareness of these matters in various professional groups.

Some mental hospitals are encouraging the community to take an interest in the patients, but the geographical factors often militate against these commendable efforts.

The mental hospitals provide training for the Diploma in Psychological Medicine for undergraduate medical students and training for occupational therapy students, and mental nurses.

Diverse Psychiatric Services

Psychiatric treatment is provided by various other bodies and institutions such as licensed nursing homes, homes and occupation centres for mental defectives, and mental health societies. Government and voluntary organizations assist in dealing with epilepsy, child welfare and physical handicaps. Prisoners are entitled to the benefit of psychiatric assessment.

School psychological services are provided. Special schools or special classes in schools exist for retarded children, and industrial schools and special schools for disturbed children cater for children from poor homes.

Facilities for the treatment of chronic alcoholism and drug addiction are insufficient, although in the Transvaal much good work is done by the Rand Aid Association at Northlea for males and at Mount Collins for females. The work of The Gables in Johannesburg is worthy of note. In the Cape, the Provincial Administration has provided a special hospital — the Park Road Hospital — for the treatment of alcoholics.

In the Transvaal, the Provincial Administration provides some psychiatric services: at the Johannesburg General Hospital there is a Department of Psychological Medicine in the charge of a full-time Professor of Psychiatry, who is Head of the Department of Psychiatry and Mental Hygiene of the University of the Witwatersrand.

One ward of about 30 beds is available for psychiatric cases that are manageable in a general hospital setting. In addition, daily out-patient clinics are conducted and in-patient consultative and therapeutic services are rendered in all the wards of the Johannesburg General Hospital as well as in the related central groups of hospitals in Johannesburg and in the Baragwanath and Coronation Hospitals.

The Tara Hospital at Johannesburg caters for the treatment of patients suffering from the more serious and more urgent psychoneuroses and the minor forms of mental illness. The hospital also renders out-patient services for adults and children and provides in-patient care for emotionally disturbed children. In addition, provision is made for day-patients and for a therapeutic social club for ex-patients. A more recent development is the hospital's community domiciliary service.

Psychiatric training programmes have for some years been in operation at Tara Hospital for various professional groups:

A Diploma in Psychological Medicine is offered in association with the University of the Witwatersrand, and a postgraduate course is offered in neurological and psychiatric nursing. This training is recognized by the South African Nursing Council.

Courses in psychology applied to human relations are attended by senior nurses from general hospitals in training for the Diploma in Hospital Administration. Similar courses are offered to general hospital ward sisters. Student nurses in the final year of study for general nursing may attend special courses at Tara Hospital for 2 months.

In order to help health visitors deal with the large number of psychiatric and social problems which they encounter, a short course of training has been started. Health visitors have access to normal homes and so are in a position to help in protective mental health work. This development has a great potential value in the promotion of community care of the mentally ill. Social workers in voluntary agencies may join this course.

Posts for interns in clinical psychology exist at Tara Hospital. This experience is recognized by the South African Medical and Dental Council for registration in clinical psychology.

Provision is made in the training of occupational therapists and social workers for the students to receive psychiatric experience. In addition, there are courses for educationalists, and training groups are organized for professional workers whose disciplines have a direct or even an indirect bearing on mental health.

A course is also provided for general practitioners, who recognize that at least 50% of their cases have psychiatric or psychosomatic symptoms.

Outside Johannesburg, each of the larger public hospitals in the Transvaal has a part-time psychiatrist. In the Cape, the Provincial Administration provides a psychiatric service at the Groote Schuur Hospital. Reference has already been made to the hospital which caters for alcoholics in Cape Town. Posts for part-time psychiatrists exist outside of Cape Town in some of the larger provincial hospitals in the Cape, also in Natal.

Because the mental hospitals are short of accommodation and because there is, as yet, no generally developed psychiatric community service, general hospitals in all the Provinces are admitting (as medical emergencies) psychiatric patients with, for instance, self-inflicted wounds and toxic deliria or patients who have taken an overdose of drugs. For the same reasons, prison cells are still being used for the mentally ill awaiting admittance to a mental hospital.

In the larger centres of the Union there are child guidance clinics for White children. There is one clinic in Cape Town for non-Whites. The clinics are run by voluntary bodies, mental health societies, or universities. The clinics in operation are too few to have an appreciable effect as a protective service.

There is a great need for revision of our ideas regarding rehabilitation services. The sense in which the term rehabilitation is here used includes all the steps taken to assist a sick person to become a useful member of the community, and for a handicapped person to be raised to the highest level of social usefulness. In terms of this definition the facilities for the rehabilitation of the mentally ill are poorly developed. For example, sheltered employment is at present mainly oriented to the needs of the physically handicapped. Comparatively few cases of mental illness are dealt with at units for sheltered employment and these cases comprise mainly epileptics and mental defectives. The existing framework for sheltered employment makes little effective provision for patients suffering from the psychoses, the neuroses, and the various psychopathic states.

PLANNING FOR FUTURE DEVELOPMENT

Every one of the fields mentioned needs' development, whether at protective, curative, after-care or rehabilitative levels. The manner in which these services are likely to be expanded in the future has been discussed elsewhere.[2,4,5,9-16] In this article I shall confine myself more specifically to a few concepts which should be applied when designing and planning a modern mental health service, making the best possible use of limited resources.

1. *Realistic Plans*

The plans should be realistic. The medical and nursing staffs of the existing mental service, the government administrators, and the public will have to be convinced that the scheme is workable and that it will benefit all concerned.

As a result of hospital overcrowding and the shortage of personnel, doctors and nurses will have to be convinced that their work will be made easier. It is therefore necessary to elicit their support, otherwise it is highly unlikely that the scheme will work. It must also be borne in mind that administrators are more likely to approve of plans that can be started without involving them in any great financial or political responsibilities. Moreover, improvement in

community attitudes to psychiatry is a necessary prerequisite for successful planning for the future in this field.

2. *Small Treatment Centres*

It is estimated that less than 10% of all mentally ill patients need admittance to a mental hospital. The trend is to avoid the building of large expensive permanent mental hospitals, and to treat patients in the community, in their homes, at work, at school, in out-patient clinics, at day or night hospitals, at therapeutic social clubs, in psychiatric sections of general hospitals, and in small mental hospitals where active treatment can be carried out. Community services should be a coordinated extension of such small treatment centres and the provision of suitably trained personnel should be specially stressed in these units. This system must be managed as a whole in which continuity of treatment for each case, from the inception of treatment to the rehabilitative stage must, as far as possible, be ensured.

The psychiatric hospital of the future may be visualized as the headquarters and the training and research centre of the local mental health organization with only a small residential unit for special treatment and investigation.

The foregoing measures would ease the work of doctors and nurses, because most of the patients would be treated as ambulatory patients. Gross overcrowding which impedes mental hospital reform will therefore be reduced. It has been found elsewhere that many patients, formerly admitted to mental hospitals, can be successfully treated as out-patients. Doctors welcome this trend. Furthermore, compared to hospitalization, out-patient treatment is relatively inexpensive and it is preferred by the community. The prestige of mental hospitals overseas depends to a great extent on efficacy of their out-patient work. Electroconvulsive therapy is given on an out-patient basis at the hospital as well as at mental health society clinics. Out-patient treatment of this nature is safe and reduces the number of admissions to hospital. Moreover, through the out-patient clinics closer links are established with general medicine, especially if these clinics are conducted in a general hospital.

3. *'Open' Hospitals*

The 'open' hospital for the treatment of mental disorder is one of the present trends. Security measures are believed to be necessary for only a small minority of patients. Patients are encouraged to come voluntarily for treatment, as they would to any other hospital. Hospital staffs are assuming more positive attitudes. Opposition from nursing staff is sometimes experienced in the beginning, but when they find that their work is made easier after the first ward has been opened, they usually request an extension of the open-ward system to other wards.

4. *Community Attitudes*

The following steps should be taken in an attempt to improve the attitudes of the community towards psychiatry:

(*a*) Psychiatric activities should be integrated with general public health work, or at least coordinated with it.

Wherever services are provided for health care in the home, at work, or at school, mental health care should be an integral part of these services and should be oriented towards promotion of mental health and the prevention, early detection, treatment, after-care and rehabilitation of the mentally ill.[3] The staffs of the general hospital and the mental hospital should work in collaboration. When possible, social workers of the mental hospital and the local authority and health officers of voluntary and State-sponsored services concerned with mental health and the welfare of discharged patients, should work together and have a place in a psychiatric domiciliary service. Where such services do not exist, they should be developed as the need arises as part of a preconceived coordinated plan. For financial reasons these services may have to be developed singly, or in sparsely populated areas they may have to be modified or trimmed to suit local needs.

(*b*) The public should be educated and kept informed by adequately trained educators. At the same time the need for caution and discretion regarding the facile generalizations of uncritical secular 'missionaries' should be stressed.

Active participation which, according to the theory of education, is the best guarantee of thorough understanding and effective learning, can sometimes be obtained by the organization of 'open days' for visiting the hospital; occasionally by inviting volunteer helpers to the establishment; in many cases by establishing working relations with all sorts of fellow citizens such as industrial leaders, teachers, legislators and administrators.[4]

Parents are an important factor in the modification of community attitudes. If they understand mental illness within their own families, they will be in a position to condition the attitudes of future generations, and to influence other families showing prejudice.

(*c*) Active forms of treatment that can be applied without segregation of patients should be developed.

5. *Mobile Psychiatric Clinics*

In the sparsely populated areas of South Africa where there are no psychiatric services, the establishment of well-staffed mobile psychiatric clinics needs consideration. Where there is no mental hospital a headquarters should be established from which a mobile team can operate. This team should preferably be attached to a general hospital where provision can be made for the training of staff, for records to be kept, for storage, and ultimately for special investigations to be carried out. Amongst the non-urbanized non-White communities, who are accustomed to care for their mentally sick, this tradition should be preserved; in these cases the mobile team should only supervise and prescribe treatment.

'Elsewhere a treatment centre can be set up, consisting of a number of very simple buildings in which the patients and their families can live. The adjacent headquarters then serve as a base for the treatment of out-patients as well as of residents. Non-medical staff should be recruited locally; and since their duties will be almost entirely custodial, they can be untrained, even illiterate. In fact, illiteracy is sometimes an asset as unsophisticated patients may mistrust a literate person. One of the main advantages of this system is that it enables patients to be treated in their home environment and the relatives not only see what is going on but also help with the nursing. For the incurable socially unacceptable patient, who cannot be admitted to these treatment centres, other arrangements must be made. But the hope of recovery should never be abandoned, nor should the patient be allowed to sink into a state of social dilapidation.'[1]

The mental health of South Africa's non-White population needs special mention. Mental-health problems and group attitudes which arise from the country's multi-racial and multi-cultural structure require research. The need for training non-White psychiatrists, clinical psychologists, and mental nurses cannot for long be disregarded.

6. *The Long-stay Unit*

In urban centres the long-stay unit is a necessary complement of the short-term active treatment centre.[1,4,10] The central custodial type of hospital is undesirable; the 'working village' and 'farm colony' are good alternatives.

7. *Community Services*

The development of community-treatment facilities in rural and in urban centres does not require the provision of expensive purpose-designed buildings. Most of the services contemplated can be provided by the conversion of existing buildings sited in the community it is proposed to serve. The principal expense should be in the recruiting, training and appointment of personnel.[15]

8. *Multi-professional Effort*

It is recognized that mental health work requires a multi-professional effort in which the other branches of the science of Man, including the social sciences, are full and active partners.[7] Modern dynamic psychiatry cannot work in isolation; it needs to work in cooperation with all the health and social agencies for the effective prophylaxis, treatment, after-care and rehabilitation of mental illness. The workers in the field of mental health need to work in close partnership with the Provincial health and educational services, public health and maternity services, baby clinics, child-guidance and marriage-guidance clinics, school-medical services, mental health and child-welfare organizations, and with all other health services and social services including the voluntary agencies.

9. *Rehabilitation*

Facilities for the rehabilitation of the mentally ill need to be modified to meet their special needs. For example, the criteria which allow an individual to enter sheltered employment must be relaxed (at present 50% productivity is prescribed). Sheltered employment is still unfortunately viewed as an end or terminal phase rather than as continuation of treatment for the mentally ill. More flexible scales of pay should be instituted.

In addition, if the patient is enabled to keep in close touch with his home, his friends and his work during his stay in hospital, he will find it easier to pick up the threads again after leaving hospital.

10. *Community Care*

Community-care schemes such as exist in Amsterdam need consideration.[5]

11. *General Hospitals*

Psychiatric units in general hospitals must be developed.[12-16]

TRAINING OF PERSONNEL

The first requisite for giving effect to the foregoing principles is the availability of suitably trained staff. The country must provide for the training and re-training of personnel to meet the needs of the multi-racial and multi-focal population.

Training must cover such a wide and multi-disciplinary field that it is unlikely to be able to take place at once. Nevertheless, the financial burden of mental illness and its toll on human happiness must receive urgent attention, and every effort must be made to provide and retain trained staff for the country's mental health services.

Training programmes must be kept up to date and made more attractive. Staffing needs and conditions of service require constant evaluation and adaptation to changing needs and values. By these means it will perhaps be possible to attract people to work in the psychiatric field.

With regard to the place of psychiatry in the medical faculties of our Universities, Professor H. C. Rümke, in a personal communication, writes:

'The establishment of full-time professorships in psychiatry at South African medical schools must be regarded as a necessity if the development of the country's mental health services is to keep pace with changing concepts in this field.'

There are 80 practising psychiatrists for a population of 13 million. To meet the shortage additional training facilities (including bursaries) must be established; psychiatric research must be encouraged (finance and facilities must be made available); and study leave as an incentive to recruitment of personnel needs very serious consideration.

Suitable training must be provided for doctors in industry. Neurosis is said to be the largest single cause of absenteeism in industry.[6] Training must also be provided for nurses and social workers employed in industry, as well as for personnel managers.

The improvement and extension of mental health education in medical and nursing colleges, teachers' training colleges, schools of social welfare and other professional training schools, is one of the central objectives for World Mental Health Year. Already there is evidence of improvement in the training in some fields. A course of psychology applied to human relations has been included in the revised syllabus of training for general nurses, and it is stated that 3 months' experience of psychiatric nursing for all student general nurses is desirable.

The syllabus of training for health visitors now includes a section on social and mental health problems.

At one of the training colleges for teachers, school principals are receiving instruction to enable them to deal with emotional problems in children, staff, and parents. This is one of the protective measures which requires emphasis in mental hygiene. Teachers at all levels from nursery school to university should be aware of the early signs of mental breakdown. Such training must lead to early referral for treatment; to research in child psychiatry, and so to the extension of psychiatric and psychological services for children, e.g. child-guidance clinics, psychological services for schools, etc.

The psychiatric needs of patients should be brought to the attention of doctors in public health,[3] obstetricians, paediatricians, general practitioners, midwives, parents, officials working in maternal and child-care departments, speech therapists, persons in charge of children's institutions, homes for defectives, boys' and girls' clubs, and selected workers in voluntary agencies. These examples illustrate the importance of training non-psychiatric personnel in mental health principles.

There are many problems associated with student mental health which call for the training of student counsellors for universities, for training colleges for nurses and for other institutions where students are in training.[17] The need for providing more training facilities for clinical psychologists, as required for registration purposes by the South African Medical and Dental Council, is self-evident.

With regard to social workers, opinions appear to be divided on the question of specialization in the psychiatric field. The need for training with a psychiatric orientation is, however, beyond dispute.

The training of the multi-disciplined team for a community service is essential for, with the exception of social workers, all other members will require instruction for working in the community. Social workers already have this training.

It is estimated that South Africa has a potential nursing force of 25,000. If all nurses had had even an elementary training in mental health and if some were provided with opportunities for advanced training in psychiatric nursing, it is not unreasonable to believe that the battle against mental illness would be greatly facilitated.

SUMMARY

1. South Africa's mental health services require development in keeping with the revolution which is at present taking place in the field of mental health.

2. Mental-health problems arising from the multi-racial and multi-focal structure of the country's population must receive attention.

3. The planning of mental health services depends on the availability and retention of suitable personnel. The need for establishing attractive training and re-training programmes and incentives to undergo such training is seen as the starting point for the further development of the country's psychiatric services.

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EDITORIAL : VAN DIE REDAKSIE

WORLD MENTAL HEALTH YEAR 1960

During the past decade the climate of opinion has been changing rapidly in regard to the need for the promotion of positive mental health, as well as for the reduction of human suffering and material loss which can be brought about by the better care and treatment of those who are mentally ill. The time seems to have come for a reconsideration of values, for fact-finding, and the development of better informed public and professional interest.

To help accomplish this aim and in order to focus attention on needs in this field, the World Federation for Mental Health, of which the South African National Council for Mental Health is a foundation member, has designated the year 1960 as World Mental Health Year (WMHY). The World Federation for Mental Health is an international organization for the promotion of mental health, and represents professional societies in forty-three countries and their dependent territories.

The purpose of WMHY is to promote and plan a long-range programme and to focus attention on a number of continuing activities. Some of these have already started, others will be launched during the rest of 1960, and it is possible that some may have achieved positive results by the time the proposed International Congress on Mental Health assembles in Paris in September 1961. Like the International Geophysical Year, the WMHY will be elastic in its duration. The various projects embraced by it will continue to be implemented long after the year's span is technically completed, and may well cover a decade of research and development.

It would be useful to set out very briefly the present position of the planning: Five projects have been selected by the World Federation for Mental Health as suitable for particular study during WMHY. Each project will be carried out under the general direction of a coordinator or chief investigator with a number of professional helpers who may be located in various parts of the world and who will make their contribution in survey, research or action under the guidance of the coordinator.

The five projects are: (1) The world-wide study of childhood mental health, (2) cross-cultural surveys of attitudes to mental disorders, (3) mental health teaching in professional education, (4) mental health and developing industrialization, and (5) psychological problems of migration, whether voluntary or (as in the case of refugees) involuntary. (In this context it is of interest that World Mental Health Year will run concurrently with the recently announced World Refugee Year which will be devoted to the task of moving refugees from their existing camps and re-settling them in normal surroundings. Such rehabilitation will, however, bring its psychological problems, and the World Federation for Mental Health is convinced that the subject calls for extended research.)

The responsibility for direction and advice on these five projects will rest with Dr. Kenneth Soddy, Scientific Director of the World Federation. Working with him will be the Scientific Committee of the Federation composed of Prof. H. C. Rümke (Netherlands), Chairman; Prof. Otto Klineberg (USA); Prof. D. Lagache (France); Dr. D. Levy (USA); Prof. the Rev. E. F. O'Doherty (Ireland); and Dr. Paul Sivadon (France).

South Africa's main contribution to World Mental Health Year will be an elaborate mental health report—the 'Blue print for mental health services in South Africa'. The planning and research work in connection with this report was carried out by the coordinating Blue-print Committee and its fifteen sub-committees under the auspices of the National Council for Mental Health. The function of this Blue-print Committee was to establish: (1) In what areas mental health services and resources were inadequate to meet the needs of the community, (2) in what areas facilities appeared to be adequate to meet present needs, and (3) the most urgent mental health services requiring development, and steps that should be taken to make such services available. The various sub-committees dealt with such problems as mental health and ill-health in relation to conditions peculiar to this country, mentally handicapped children, children exhibiting behaviour problems, the promotion of mental health and the prevention of ill-health in children, after-care and rehabilitation services, epilepsy, accommodation in nursing homes and hospitals, alcoholism, aging, anti-social behaviour, family problems, and industrial health. It is hoped that this 'Blue-print' report will be published during the first half of this year, and that it will be the forerunner of a revised Mental Health Act for South Africa.

Apart from the 'Blue print for mental health services in South Africa', the following programme has also been prepared by the Executive Committee of the South African National Council for Mental Health:

1. An approach to the Government for financial assistance to enable local authorities to integrate mental health with public health.

2. The use of pressure at every level—local authorities, city councillors, public health personnel, doctors, nurses and midwives—to develop an awareness of the importance of mental health in public health.

3. An attempt to improve the training courses for all health personnel at the level of psychology applied to human relations.

4. An approach to the Government for funds to pay a worker to compile the final report of the Blue-print Committee and to print it.

5. An approach to the Government to expedite the training of African mental nurses and to provide bursaries for the training of African psychiatrists and psychologists.

6. An approach to the Government to set up a commission to plan a mental health programme for the country—such planning to be concerned primarily with the factors which will assist in the preservation of mental health and which will reduce mental hospital costs by the development of adequate psychiatric community services.

7. By means of Government financial assistance to prepare a mental health film for South Africa.

8. To assist, by whatever means present themselves, in making mental nursing attractive and to make three months' experience in psychiatric work ultimately compulsory for general nurses.

9. To raise funds to enable research workers to assist in a variety of studies; e.g. psychological problems in general hospitals, reactions and attitudes of families towards their physically and mentally handicapped children, and the mental health of students in South Africa.

10. To increase the number of bodies affiliated with WFMH.

11. To prepare an active campaign to increase the number of South African Associate members of WFMH.

12. To prepare a handbook on psychology applied to human relations for use by student members of the health team, doctors, nurses, social workers, occupational therapists, and physiotherapists.

13. The production of a mental health newsletter.

14. A survey of what audio-visual facilities, e.g. plays and films (both local and overseas) dealing with mental health work, would be available for propaganda purposes during 1960.

15. The investigation of the gaps in the existing mental health services.

16. To approach such professional groups as the South African Medical and Dental Council with the request that they should invite prominent lecturers in the psychiatric and mental health field to South Africa during 1960.

A great deal of interest in the problems of mental health has already been aroused throughout the world by the concept of the World Mental Health Year. It is sincerely hoped that all the members and associated members of the World Federation for Mental Health will continue their cooperation in observing World Mental Health Year not only as an occasion for enlightening their peoples on health matters, but also as an affirmation of the unity of our efforts for a healthier and happier world.

DIE SAMELEWING SE ROL TEN OPSIGTE VAN GEESTESGESONDHEID

Aangesien die jaar 1960, op aandrang van die Wêreld Federasie vir Geestesgesondheid, as Wêreldgeestesgesondheidsjaar bekend sal staan, sal dit goed wees om ondersoek in te stel na die verpligtinge in hierdie verband, nie net van die mediese professie nie, maar ook van die samelewing in die geheel.

In 'n onlangse brief aan lederegerings het die Direkteur-generaal van die W.G.O. onder andere gesê: „Geestesiekte en die behoud van geestesgesondheid, stel ons voor 'n probleem wat verskil in belangrikheid en graad in verskillende dele van die wêreld. Daar is egter baie min lande, wat hul stadium van ontwikkeling ook al mag wees, wat nie rede het om ernstig begaan te wees oor die veelvuldige aspekte van hierdie probleem nie.

In Suid-Afrika het ons ook sonder twyfel rede vir bekommernis aangesien die dienste wat op hierdie gebied gelewer word, soos ons al herhaaldelike kere aangetoon het, [1,2] nie voldoende en bevredigend is nie. Dit is nie moontlik om in die bestek van 'n kort artikel al die aspekte van hierdie uitgebreide probleem te behandel nie. Wat ons egter wel wil doen is om die saak te benader in terme van die volgende drie vrae: (1) Wat is die grootste enkele probleem op die gebied van die geestesgesondheidsdienste?; (2) wat behoort daaraan gedoen te word?; en (3) hoe moet te werk gegaan word om iets positiefs tot stand te bring?

1. Dit sou geen oordrywing wees nie om te sê dat die grootste nood lê op die gebied van die gebrekkige fasiliteite wat daar bestaan (of nie bestaan nie) vir die voorkomende sorg en behandeling van daardie groot aantal persone wat aan die een of ander vorm van ligte geestesversteuring ly—die neurotiese, gespanne, ongelukkige, wanaangepaste en emosioneel onvolwasse persone wat wel nog bruikbare lede van die samelewing is, maar wat so maklik deur verwaarlosing tot onproduktiewe en selfs geestesversteurde persone kan verval.

2. Daar is verskillende moontlike benaderinge wat ten opsigte van hierdie probleem gevolg behoort te word. In die eerste plaas is daar die saak van genoegsame personeel. In hierdie land is daar verreweg nie genoeg opgeleide psigiaters om selfs die noodsaaklikste werk te behartig nie. Algemene praktisyns het dikwels òf nie genoegsame opleiding in die psigiatrie gehad nie, òf hulle beskik nie oor genoegsame tyd om aan probleme op hierdie gebied te bestee nie. Daar behoort dus 'n sistematiese veldtog uit te gaan van die kant van die samelewing, van die kant van die mediese opleidingsinrigtings en van die kant van die mediese professie as sodanig om aspirant-psigiaters te werf en hulle aan te moedig om met hulle studies voort te gaan. Ook moet daar doelbewuste pogings aangewend word om kliniese sielkundiges, psigiatriese verpleegsters, maatskaplike werksters, beroepsterapeute, en alle soorte gesondheidswerkers te betrek in die kring van noodsaaklike psigiatriese dienste.

Omdat die probleem so 'n groot omvang het, sal daar nooit genoeg spesiale hospitale bestaan vir die behandeling van ligte geestesversteurings nie. Om hierdie rede is dit dus noodsaaklik dat ons ons aansluit by tendense dwarsoor die wêreld om meer geriewe beskikbaar te stel vir psigiatriese behandeling in algemene hospitale. Die Amerikaanse Komitee van Standaarde het byvoorbeeld bereken dat ongeveer 5 tot 15 persent van alle beddens in opleidingshospitale beskikbaar gestel behoort te word vir psigiatriese behandeling en die opleiding van studente.

Ook het die opkoms van dag- en nagsentrums vir die behandeling van pasiënte, op 'n manier wat dit vir hulle moontlik maak om tog nog tuis te bly of selfs voort te gaan met hulle werk, tot groot vooruitgang gelei. In die lig van die groot koste van voltydse hospitalisasie moet die moontlikheid van die oprigting van dag- en nagsentrums op geskikte plekke in die land baie sterk in gedagte gehou word.

Laastens is daar nog die rol wat vrywillige gemeenskapsdienste speel wat genoem moet word. Ons dink hier byvoorbeeld aan die groot dienste wat gelewer word deur die Nasionale Raad vir Geestesgesondheid in hierdie land en deur verskillende geaffilieerde inrigtings met hulle klinieke in ons belangrikste stede en dorpe waar noodsaaklike werk van groot omvang gedoen word.

3. Hoe moet daar te werk gegaan word om positiewe resultate te bereik? Die praktiese stappe in hierdie verband sou kortliks soos volg opgesom kon word: In die eerste plaas moet die mediese professie as professie homself reoriënteer ten opsigte van die noodsaaklikheid van psigiatriese dienste. Dit sou beteken dat psigiatriese dienste as integrale deel van algemene mediese dienste beskou moet word en as sodanig in die hospitaalpraktyk en in die privaatpraktyk beoefen moet word. In die tweede plek moet die gemeenskap self sy eie bronne reorganiseer deur 'n volgehoue veldtog om die verkryging van beter dienste op hierdie gebied vol te hou. Ten laaste is daar die oorweging dat beplanning vir die toekoms slegs kan berus op 'n deeglike stelling van al die feite. Om hierdie rede is dit dus nodig om die regering te versoek, soos ons reeds al tevore gedoen het, om hierdie hele saak deeglik deur 'n bevoegde kommissie van ondersoek te laat ontleed.

As ons die soort samelewing wil skep waarin mense nie net bestaan nie, maar ook gelukkig en skeppend kan lewe, moet ons baie meer as wat vandag die geval is aandag gee aan die probleem van die gees en aan die faktore wat geestesversteurdheid in die hand werk. Want in so 'n groot mate is dit tog per slot van rekening die gees van die mens wat sy uiteindelike wel en wee bepaal.

1. Van die Redaksie (1958): S. Afr. T. Geneesk., **32**, 652.
2. *Idem* (1958): *Ibid.*, **33**, 269.

KLINIESE ERVARING MET DIE KUNSNIER*

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DEEL II

VOORBEREIDING VIR DIALISE

Sodra daar op 'n dialise besluit word, moet die kunsnier en die pasiënt gereed gemaak word. Om die hele prosedure te bespoedig, is dit noodsaaklik dat die kunsnier permanent in 'n goed-ingerigte vertrek gehuisves word. Dit is ook wenslik om laboratoriumfasiliteite byderhand te hê.

Voorbereiding van die Kunsnier

Ons het gevind dat een persoon die Travenol-nier binne ongeveer 1 uur gereed kan hê vir dialise. Die Battezzati-Taddei-nier het 2 - 3 persone gewoonlik 12 - 18 uur lank besig gehou voordat 'n dialise begin kon word, terwyl 2 persone die Alwall-nier gereed kon maak in ongeveer 2 - 4 uur. Vir die laasgenoemde 2 niere moes ons die sellofaanspoele self draai en al die nodige buise en ander apparaat steriliseer. Die vervaardigers van die Travenol-nier verskaf al hierdie dele as 'n reeds voorbereide verbruikbare eenheid.

Die beleid wat ons volg by die voorbereiding van die kunsnier verskil net effens van dié wat deur die vervaardigers van die Travenol-nier aanbeveel word.[33] Ons gaan soos volg te werk:

1. Die sellofaanspoel word in posisie geplaas en die nodige verbindings met die bloedpomp en bloedfilters word gemaak.
2. 'n Tycosmanometer word met die lugruimte van die bloedfilter verbind.
3. Die dialiseringstenk word met kraanwater by 'n temperatuur van 39°C gevul en 10 minute lank oor die sellofaanspoel gesirkuleer.
4. Die bloedbaan word met 4 liters steriele normaalsoutoplossing uitgespoel, en die bloedpomp word terselfdertyd gekalibreer.
5. Die dialiseringstenk word geledig en daarna gevul met dialiseringsvloeistof by 'n temperatuur van 39°C (*vide infra*).
6. Een liter normaalsoutoplossing wat 5 mg. heparien bevat, word deur die bloedbaan gepomp.
7. Die sellofaanspoel word nou getoets vir lekasie deur 200 ml. bloed wat 50 mg. heparien per liter bevat deur die spoel te pomp en op te volg met 'n liter normaalsoutoplossing wat 5 mg. heparien per liter bevat. Dialiseringsvloeistof word gedurende die toets oor die sellofaanspoel gesirkuleer en dopgehou vir enige pienkverkleuring wat op 'n lekasie mag dui.
8. Sodra die pasiënt gereed is, word die bloedbaan met bloed wat 50 mg. heparien per liter bevat, gevul tot die verwagte druk wat bereik sal word gedurende dialise. Na die kunsnier met bloed gevul is, moet die dialise onmiddellik begin word.

Die druk, soos gemeet met die manometer aan die uitvloeikant van die dialiseringseenheid, is afhanklik van die snelheid van bloedvloei asook van die deursnit en lengte van die kateter waardeur die bloed na die pasiënt teruggevoer word. Die benaderde laaivolume, asook verwagte drukke soos deur ons gevind met die Travenol-nier, is aangegee in Tabel IV.

TABEL IV. VERWAGTE DRUKKE EN BENADERDE LAAIVOLUME

Deursnit van terugvoer-kateter	*Bloedvloei ml./min.*	*Uitvloeidruk mm. Hg*	*Laaivolume ml. bloed*
—	0	0	± 800
3 mm.	± 250	± 70	± 1,000
2 mm.	± 250	± 180	± 1,200

Die Dialiseringsvog

'n Bevredigende formule[33] vir die samestelling van die dialiseringsvloeistof word aangegee deur die vervaardigers van die Travenol-nier. Kyk na Tabel II in verlede week se uitgawe van die *Tydskrif* (**34**, 155)

Die kaliumgehalte van die dialiseringsvloeistof kan verander word soos deur die omstandighede vereis. In gevalle met erge hiperkalemie kan die kaliumgehalte van die dialiseringsvloeistof baie verlaag word gedurende die eerste uur van dialise. Hierdie prosedure mag egter 'n spoedige hipokalemie veroorsaak soos ons dit ondervind het by een van ons pasiënte met 'n erge uremiese asidose en dehidrasie, waar daar waarskynlik 'n totale kaliumgebrek was nieteenstaande 'n verhoogde serumkaliumkonsentrasie.

Die glukosegehalte van die dialiseringsvloeistof kan verhoog word om filtrasie van water en sodoende dehidrasie van die pasiënte te bespoedig. Osmotiese filtrasie van water is geneig om sellulêre dehidrasie te veroorsaak, en is alleen van belang by die kunsniere wat teen 'n lae hidrostatiese druk werk.

* Vervolg van die uitgawe van die *Tydskrif* van 20 Februarie 1960, p.154

Ureum kan ook by die dialiseringsvloeistof gevoeg word in gevalle waar dit nie wenslik is om die pasiënt se bloedureumgehalte te verlaag nie—soos by pasiënte met chroniese uremie waar die verhoogde bloedureumkonsentrasie diurese bevorder.[17]

Voorbereiding van die Pasiënt

Insnydings word in die teater onder plaaslike verdowing minstens 2 uur voor die begin van 'n dialise gedoen om sodoende die sypeling van bloed vanaf die insnydingswonde na heparienisasie te verminder.

Die bloedvoorsiening vir die kunsnier verkry ons gewoonlik deur 'n politeenkateter wat tot in die inferior vena cava gestoot is vanaf 'n insnyding in die liesgebied. Die politeenkateter moet minstens 'n inwendige deursnit van 3 mm. hê met 2 of 3 laterale openinge naby die punt. Hierdie laterale openinge moet versigtig gemaak word weens die gevaar dat die punt van die kateter mag afbreek en 'n embolus veroorsaak.[5] Die bloedvoorsiening kan ook vanaf die arteria radialis verkry word. Ons het die kateter in die inferior vena cava al in posisie gelaat en weer later vir 'n tweede en derde dialise gebruik. Tussen die dialises het ons die intraveneuse vog deur hierdie kateter toegedien.

Vir die terugvoer van bloed gebruik ons gewoonlik 'n politeenkateter wat tot in die superior vena cava gestoot word vanaf 'n insnyding in elmboog, skouer of supraklavikulêre gebiede. Hierdie kateter moet minstens 'n inwendige deursnit van 2 mm. hê met geen laterale openinge nie. Om die uitvloeidruk te verminder, moet hierdie kateter so kort as moontlik wees.

In 2 dialises het ons sowel die uitvoer- as die terugvoerkateters in die inferior vena cava geplaas met baie bevredigende resultate. Die terugvoerkateter was net hoër opgestoot as die uitvoerkateter. 'n Dubbellumenkateter vir soortgelyke gebruik is nou beskikbaar en gee bevredigende resultate.[20]

Nadat die kateters in posisie geplaas is, word hulle oopgehou deur 'n stadige infusie van normaalsoutoplossing wat 100 mg. heparien per liter bevat. Ongeveer 20 minute voor die verwagte tyd van aanvang van die dialise gee ons die pasiënt 75 mg. heparien intraveneus.

VERLOOP VAN DIALISE

Tyd	*Temperatuur*	*Polsnelheid*	*Asemhaling*	*Bloeddruk*	*Gewig*	*Hemolise*	*Hematokrit*	*Hemoglobien*	*Stolityd*	*Temp. van bad*	*pH van bad*	*Uitvloeidruk*	*Berekende vogverlies*	*Bloed toegedien*	*0·9% NaCl toegedien*	*Opmerkings*
0·00																
0·10																
0·20																
0·30																
0·40																
0·50																
1·00																
1·10																
1·20																
ens.																

Afb. 9.

Prosedure gedurende Dialise

Afb. 9 is 'n voorbeeld van die kaart wat ons gebruik om die verloop van die dialise op aan te teken.

Die pasiënt se bloeddruk, polssnelheid, asemhalingsnelheid en temperatuur, asook die uitvloeidruk en die temperatuur van die dialiseringsvloeistof, word aan die begin en daarna elke 10 minute gelees en gekaart. Die pH van die dialiseringsvloeistof word elke 30 minute bepaal.

Die pasiënt se hematokrit- en hemoglobienwaardes word aan die begin en daarna minstens elke uur bepaal en terselfdertyd word opgelet na tekens van hemoliese.

Die bloedstollingstyd word ook minstens elke uur bepaal en, indien dit onder 20 minute daal, word 25—50 mg. heparien toegedien behalwe gedurende die laaste uur van dialise.

Normaalsoutoplossing word van die begin af toegedien teen die berekende snelheid om te kompenseer vir die verlies van water as gevolg van filtrasie. Die snelheid van filtrasie van water kan bepaal word deur gebruik te maak van die uitvloeidruk, soos reeds bespreek is. Sodra die hematokrit- en hemoglobienwaardes begin daal, word bloed toegedien in plaas van normaalsoutoplossing.

Die dialiseringsvloeistof word elke 2 uur vervang. 'n Bloedmonster, sowel as 'n badwatermonster, word aan die einde van elke 2-uur periode vir chemiese ontleding geneem. 'n Bloedmonster vir dieselfde doel word ook aan die begin van die dialise geneem.

TABEL V. TOTALE AANTAL PASIËNTE BEHANDEL

Kunsnier	*Aantal pasiënte*	*Aantal dialises*	*Pasiënte herstel*	*Dialises vir herstel*	*Oorlede na diurese*
Battezzati-Taddei (2 modelle) ..	7	9	1	1	1
Alwall-nier	4	5	—	—	—
Travenol-nier	15	27	5	11	2
Totaal	26	41	6	12	3

BESPREKING VAN RESULTATE

Soon Tabel V aantoon, het ons in ongeveer 3 jaar sedert Desember 1955 'n totaal van 41 dialises op 26 pasiënte uitgevoer met die gebruik van 4 verskillende kunsniere. Van die 26 pasiënte het 6 bevredigend herstel. Drie verdere pasiënte is in die diuretiese fase oorlede; 1 aan 'n longembolus nadat sy reeds op was, die tweede aan 'n bekkeninfeksie wat die gevolg was van 'n septiese miskraam, en 'n derde pasiënt met Henoch-Schonlein purpura aan 'n serebrale insident met konvulsies nadat diurese reeds goed aan die gang was.

'n Ontleding van die groep pasiënte wat ons sedert Maart 1958 met behulp van die Travenol-nier behandel het, word in Tabel VI aangetoon. Uit 'n totaal van 15 pasiënte op wie 27 dialises uitgevoer is, het 5 pasiënte bevredigend herstel en 'n verdere 2 pasiënte is oorlede nadat diurese reeds begin het. Volgens die kliniese beeld en bevindinge by toelating kan hierdie reeks pasiënte hoofsaaklik in 3 groepe verdeel word, soos volg:

1. Akute uremie; geaardheid van nierletsel duidelik by toelating.

2. Akute uremie; geaardheid van nierletsel onduidelik by toelating.

3. Chroniese uremie.

Tabel VI toon aan dat 4 van die 7 pasiënte in groep 1, bevredigend herstel het en dat 2 verdere pasiënte uit hierdie groep oorlede is aan komplikasies nadat diurese reeds begin

TABEL VI. GROEP BEHANDEL MET TRAVENOL-NIER

Diagnose by toelating	*Akute uremie; patogenese duidelik*	*Akute uremie; patogenese onduidelik*	*Chroniese uremie*	*Aantal dialises*	*Herstel*	*Outopsie en ander opmerkings*
1. Gastro-enteritis		1		1		Suppuratiewe piëlonefritis.
2. 8 weke swanger		1		1		Geen.
3. Swartwaterkoors	1			2	H	Anurie 18 dae.
4. Obstruktiewe piëlonefritis			1	1		Geen.
5. Porfirie en pneumonie		1		2		Geen.
6. Akute anurie en brongopneumonie		1		2		Chroniese piëlonefritis. Brongopneumonie.
7. Vorige sampioenvergiftiging en geelsug			1	1		Chroniese piëlonefrites
8. Eklampsie	1			2	H	Anurie 12 dae.
9. Eklampsie	1			2	H	Anurie 12 dae.
10. Miskraam, bekkeninfeksie en pneumonie	1			4	H	Anurie 16 dae.
11. Hidronefrose en piëlonefritis			1	1	H	
12. Miskraam, bekkeninfeksie en pneumonie	1			3		Anurie 20 dae. Oorlede in diuretiese fase pneumonie, bekkeninfeksie, tubulêre nekrose.
13. Septisemie en cholangiolitis		1		1		Membraneuse glomerulonefritis en cholangiolitis
14. Swartwaterkoors en Ludwig se angina	1			3		Anurie 35 dae. Outopsie: Bilaterale kortikale nekrose.
15. Henoch-Schonlein purpura	1			1		Anurie 10 dae. Oorlede na diurese a.g.v. konvulsies.
Totaal	7	5	3	27		
Totaal herstel	4	0	1			
Aantal dialises	17	7	3			

het. Van die pasiënte in groep 2, waar die geaardheid van die nierletsel wat verantwoordelik was vir die akute uremie onduidelik was by toelating, het nie een van die 5 pasiënte herstel nie.

Verskeie werkers het aangetoon dat wanneer die kliniese beeld van 'n pasiënt met akute uremie deur bykomstige of kompliserende faktore oorskadu word, die vooruitsigte om sukses met behandeling te behaal swak is. Dit was ook ons ondervinding gewees veral met die laaste 4 pasiënte in hierdie reeks.

Soos mens sou verwag kan van Tabel VI gesien word dat die pasiënte met akute uremie, gekompliseerd deur infeksies of weefselnekrose, meer dikwels gedialiseer moes word as die pasiënte sonder komplikasies. Pasiënt nr. 10 is byvoorbeeld 4 maal gedialiseer oor 'n tydperk van 10 dae gedurende 'n anuriese fase wat 16 dae geduur het.

Aldrie die pasiënte in groep 3 met tydelike verergering van 'n chroniese uremie het goeie verbetering getoon net na dialise. By 2 van die pasiënte het die verbetering net 'n paar dae geduur, terwyl die derde pasiënt verbeter het totdat hy 'n bykomstige komplikasie opgedoen het 2 maande later.

AANWYSINGS VIR GEBRUIK VAN KUNSNIER

1. Akute omkeerbare uremie met anurie of erge oligurie.
2. Chroniese uremie; uitgesoekte gevalle.
3. Vergiftiging met stowwe sonder primêre nefrotoksiese werking. Bromiedes,[21] barbiturate,[19] salisilate,[6] alkohol[29] en streptomisien.[7]
4. Pre- en post-operatief.[17]
5. Ammoniakvergiftiging by lewerversaking.[12]
6. Eksperimenteel.[1,8,23]

1. *Akute Omkeerbare Uremie*

Ten aanvang is dit weereens belangrik om te beklemtoon dat dialise geensins die beproefde konserwatiewe behandelingsprogram vervang nie, maar alleenlik aanvul. Elke geval moet individueel gehanteer word en die optimale tyd vir dialise, indien nodig, moet bepaal word. Hier is ons neiging tot vroeër eerder dan later dialise. So dikwels word gevalle na ons verwys in 'n terminale bewustelose toestand nadat alle ander maatreëls misluk het en dan word 'n wonderwerk verwag.

Dialise is 'n veilige prosedure en vroeë dialise kan alleenlik tot voordeel van die pasiënt strek.[5,27] Tussentydse konserwatiewe behandeling word hierdeur baie makliker gemaak en die latere komplikasies van uremie word vermy; die dialise is ook veel makliker in die afwesigheid van hierdie komplikasies (soos bv. uremiese ingewandsulserasies met bloeding).

Wanneer moet gedialiseer word in gevalle met akute omkeerbare uremie? Dringende indikasies tot dialise, wanneer die pasiënt goed onder beheer met konserwatiewe behandeling is, is soos volg:

(*a*) *Kliniese toestand van pasiënt.* Daar moet gelet word op (i) enige waarneembare kliniese agteruitgang te wyte aan toenemende uremie wat op sigself as 'n indikasie tot dialise dien. In ons reeks van gevalle het ons die volgende simptome en tekens opgemerk en as belangrike indikasies beskou: verstandelike beneweldheid, naarheid, braking, uremiese enteritis, hartaritmieë, en, een keer, perikarditis; en op (ii) dreigende longedeem en hartversaking as gevolg van oorhidrasie wat onmiddellike dialise vereis.

(*b*) *Afwykings in bloedchemie.* (i) Kaliumgehalte van serum oor 7 m.Ekw./l. (ii) HCO_3 onder 13 m.Ekw./l. (iii)

bloedureum oor 384 mg.%.[27] Barlas en Kolff, in 'n onlangse publikasie,[4] beskou 'n bloedureum oor 200 mg.% as 'n belangrike indikasie tot dialise. Ons is geneig om saam met Kolff te stem omdat ons ook soms vinnige kliniese agteruitgang bo hierdie syfer waargeneem het. (iv) Verhoging van die magnesium en sulfaat van die serum is so 'n konstante bevinding by akute uremie[9,11] dat met meer ondervinding in hierdie bepalings, dit as belangrike maatstawwe mag dien by oorweging van dialise.

Dit is dus onmoontlik om die tyd van dialise uit te druk in dae van anurie, veral met variërende spoed van katabolisme, en die oordeel hang dus af van die kliniese en chemiese toestand van die pasiënt wat beïnvloed word deur die patologie aanwesig, bv. infeksie en ander oorsake van weefselafbraak. Een geval met anurie te wyte aan septiese aborsie en bekkeninfeksie en pneumonie het 4 dialises benodig oor 'n periode van 10 dae; 'n ander geval met anurie te wyte aan eklampsie het 6 dae geneem tussen 2 dialises. Albei gevalle het herstel.

Ons beste resultate is verkry in die groep van gevalle waar die *kliniese beeld oorheers word deur die simptome van uremie en nie deur simptome van primêre patologie nie*, d.w.s. waar die oorsaak van die renale ontoereikendheid opgehef is en ons alleen te doen het met die gevolge daarvan.

Ideaal gesproke is dialise net aangedui in omkeerbare gevalle. Prakties gesproke is daar 'n groep van gevalle wat uiteindelik onomkeerbaar gevind word. In hierdie twyfelagtige groep word die pasiënt gedialiseer om hom alle moontlike voordeel te gee, maar gewoonlik met swak resultate.

Bilaterale kortikale nekrose word beskou as die uiterste graad van tubulêre nekrose en gewoonlik onomkeerbaar. Aanvanklik kan net gespekuleer word oor die graad van die skade. Moontlik sal nierbiopsies hier van waarde wees. Ons het nog nie nierbiopsie in dié tipe van geval gedoen nie, grotendeels omdat hulle almal baie siek is.

Dan is daar chroniese gevalle wat nooit simptome gehad het nie, en akuut presenteer in die terminale fase. Byvoorbeeld, een pasiënt was simptoomvry tot 2 weke voor haar dood toe sy begin siek word het met vae spierpyne; 1 week later was sy in uremiese koma met oligurie. By outopsie na 2 dialises was albei niere klein en verskrompel met 'n gewig van 20 en 35 g. respektiewelik.

2. *Chroniese Uremie*

Ons moet dadelik noem dat seleksie van gevalle baie moeilik is. Dialise word hier hoofsaaklik gebruik om simptome te verlig en nie soseer vir bestaande bloedchemieafwykings nie.

Merrill[22,24] meen dat die beste tipe geval dié is waar hipertensiewe kardiovaskulêre siekte nie die hoofprobleem is nie en waar die pasiënt nog meer as 1,000—1,500 ml. urien per dag uitskei. Lastige simptome soos naarheid, vomering, swakheid, apatie, tetanie, en konvulsies verbeter na dialise.

Indien remissies van baie korte duur is, is daar geen verdere indikasie vir dialise nie. Die familie behoort vooraf goed ingelig te word. Soms word 'n remissie van 'n paar maande verkry wat definitief die moeite werd is. Een van ons eerste gevalle was 'n geval van chroniese uremie wat ernstig siek was met stuipe, en sy het 'n goeie remissie gekry na dialise.

Chroniese uremie wat in dekompensasie-fase gaan as gevolg van tussenkomende siekte, kan gedialiseer word met die hoop om weer die voorafgaande status te bereik.

3. *Dialiseerbare Gifstowwe sonder Primêre Nefrotoksiese Werking*

Hiervan het ons nie ondervinding gehad in ons reeks nie. Dialise is veral effektief in bromied-vergiftiging[21] aangesien die kunsnier bromiede baie meer effektief elimineer as 'n normale nier. In die Necker-Hospitaal, Parys, Frankryk, is dramatiese resultate verkry in moeilike gevalle van delirium tremens.[28] Ander vergiftigings wat effektief behandel kan word met die kunsnier is salisilate,[6] streptomisien,[7] fenobarbitoon, en, tot 'n mindere mate, pentobarbitoon.[17,19]

4. *Pre- en Post-operatief*

Dialise is veral van groot waarde pre-operatief in verwaarloosde urologiese gevalle waar dit onnodige lang periodes van kateterdreinasie uitskakel. Post-chirurgiese anurie is gewoonlik te wyte aan tubuloreksis en dialise kan hier met groot sukses gebruik word. Onverenigbare oortappings moet altyd in gedagte gehou word as oorsaak by hierdie pasiënte.

5. *Ammoniak-intoksikasie by Lewerversaking*

Volgens die werk van Kiley *et al.* blyk dit dat hemodialise van waarde is by die behandeling van gevalle van lewerversaking met ammoniakvergiftiging.[12]

KONTRA-INDIKASIE VIR DIALISE

Aktiewe inwendige bloeding is voorheen as absolute kontraindikasie beskou alhoewel selfs dit nou in twyfel getrek word.[25] Ons beskou dit egter nog as 'n belangrike oorweging teen dialise.

OPSOMMING

Die ervaring opgedoen oor die afgelope 3 jaar, tydens 41 dialises, uitgevoer op 26 pasiënte deur middel van 4 verskillende kunsniere, word beskryf. Die grondbeginsels van ekstrakorporeale hemodialise, asook die werking van sommige kunsniere, word uiteengesit.

Tydens dialise vind daar belangrike volumetriese, sowel as chemiese veranderinge plaas. Hierdie veranderinge word beskryf en voorsorgmaatreëls om moontlike komplikasies te voorkom, veral as gevolg van vogverlies, word aan die hand gedoen.

'n Uiteensetting van ons resultate toon aan dat uit die totale groep van 26 pasiënte wat gedialiseer is, ongeveer $\frac{1}{3}$ bevredigend herstel het. Die 15 pasiënte wat met die Travenolnier behandel is, het dieselfde herstelsyfer van $\frac{1}{3}$ getoon. Die beste herstelsyfer, 4 uit 7, is gevind in die groep van pasiënte wat voorgedoen het as gevalle van akute uremie, waarvoor daar by toelating 'n duidelike oorsaak gevind kon word.

Die indikasies vir ekstrakorporeale hemodialise word bespreek.

SUMMARY

This article describes our experience with 4 types of artificial kidneys, by means of which we performed 41 dialyses on 26 patients during the course of 3 years. The principles of extracorporeal haemodialysis and the method of operation of some of the artificial kidneys are outlined.

During dialysis important volumetric and chemical changes take place. These changes are described, and precautions for the prevention of complications, especially as a result of fluid loss, are suggested.

Our results show that $\frac{1}{3}$ of the total group of 26 patients made a satisfactory recovery. Similarly $\frac{1}{3}$ of the 15 patients, treated with the Travenol kidney, recovered satisfactorily.

The group of acute uremic patients, with an obvious cause for renal failure on admission, gave the best results, as 4 out of the 7 patients recovered.

The indications for extracorporeal haemodialysis are discussed.

Ons bedank almal wat ons met hulp bygestaan het, in besonder dr. L. de Villiers en die personeel van die Biochemiese Afdeling van die Instituut vir Patologie van die Universiteit van Pretoria vir die chemiese bepalings; dr. I. Venter van die Departement Chirurgie vir die Insnydings; die personeel van die Suid-Afrikaanse Bloedoortappingsdiens aan die Pretoriase Hospitaal vir hulle medewerking; en mnr. S. J. M. van Staden vir die sketse. Ons dank ook aan prof. H. W. Snyman vir die geleentheid aan ons gegee om hierdie werk te doen en die Superintendent van die Pretoriase Hospitaal vir sy toestemming om die gevalle te publiseer.

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AN OESOPHAGEAL TUMOUR

REPORT OF A CASE

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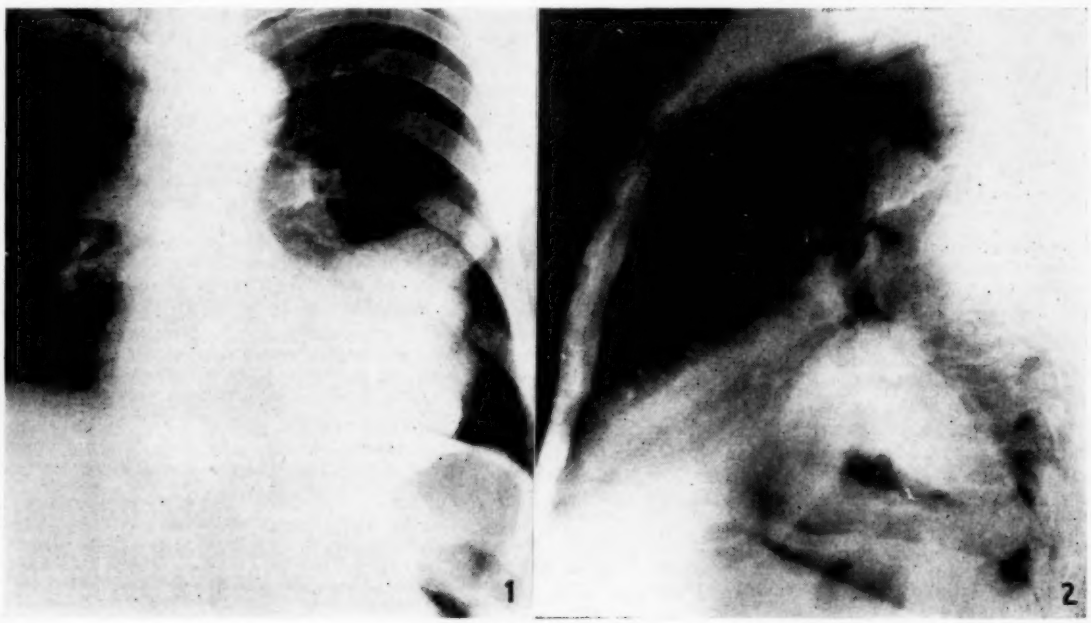
A Coloured male aged 47 presented with a 5-months history of pain in the right upper quadrant of the abdomen, and anorexia. On one occasion, 2 years previously, he had vomited a small amount of fresh blood.

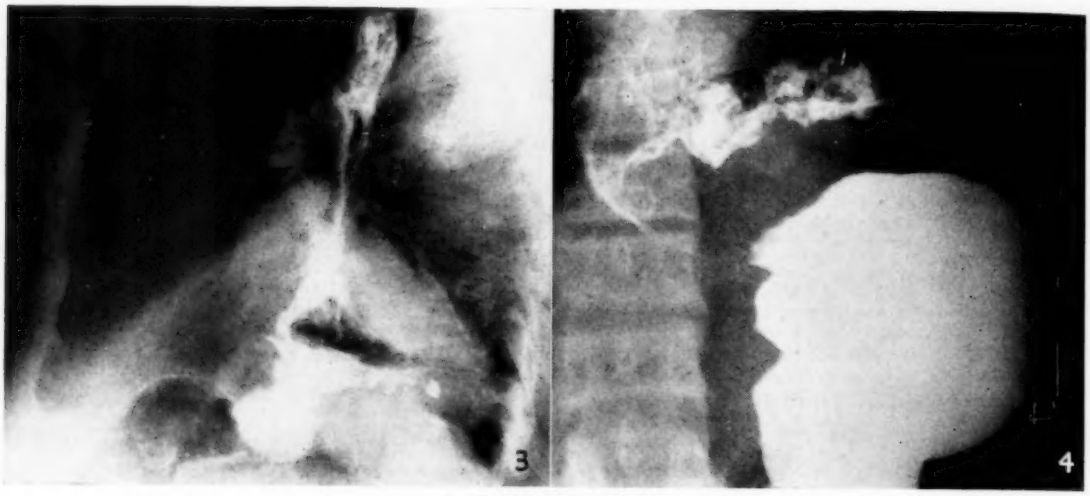
On examination evidence was found of marked loss of weight and a 6-finger hepatomegaly.

X-ray of the chest showed a lobulated mass in the posterior mediastinum, which extended into the left hemithorax and contained a fluid level (Figs. 1 and 2). Liver biopsy showed infiltration with a spindle-cell sarcoma.

Barium swallow showed an irregular appearance in the lower third of the oesophagus which was moderately dilated. There



Figs. 1 *and* 2. X-ray of chest.



Figs. 3 *and* 4. Barium swallow.

was a communication with the lumen of the mediastinal mass (Figs. 3 and 4).

Oesophagoscopy showed a smooth mass projecting into the lumen, and biopsy gave similar tissue to that already obtained by liver puncture. Mitotic figures were present but not numerous and there was a moderate degree of cellular atypicality. The most likely diagnosis was considered to be leiomyosarcoma with hepatic metastases, and the histological picture was compatible with this (Fig. 5).

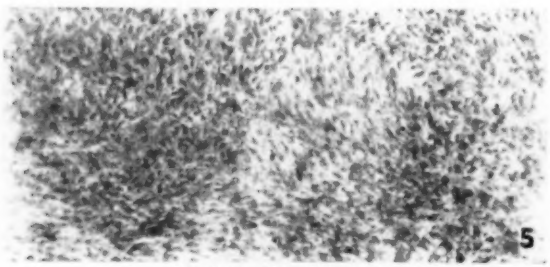


Fig. 5. Oesophageal biopsy.

DISCUSSION

Smooth-muscle tumours of the gastro-intestinal tract are well described,[1-3] and may vary from a few millimetres to many centimetres in diameter. Metastases may sometimes be found. Various authors[2-4] note that it may be difficult or impossible to distinguish histologically between smooth muscle tumours and neurilemmomas or Schwann-cell tumours, which are said not to undergo metastasis.[5]

The presentation of this case is unusual. Only 6 of Golden and Stout's series of 60 cases gave evidence of metastases and probably only 2 presented as a result of them. Lumb states that metastasis is a rare event; he supports the views of others that histological assessment of malignancy may be difficult. The findings here accord with this.

Central cavitation, presumably due to poor blood supply, is a feature of smooth-muscle tumours but is not confined to them nor only to those associated with the gut.[6] It is usually found in the larger specimens, but not always so, and appears to be preceded by colliquative necrosis.[3]

The radiological findings here are typical of the extra-luminal type of growth which tends to expand outward and reach a large size. Obstruction is not usually a feature, but there may be pressure on other organs. A sinus leading into the centre of the tumour may be noted.[2, 7] Martin[7] states that there may be interference with peristalsis round this type of tumour, and air seen on straight X-ray in such a tumour has previously been reported,[3] but we have not seen a similar lesion recorded in the oesophagus. Sinus formation has been reported in several other varieties of tumour—lymphoma and primary melanoma[7] and neurilemmoma[8] are amongst the commonest. Buckstein[9] quotes Lapidaris' case where a filiform sinus was seen leading from a tumour in the prepyloric region. This eventually proved to be a duct in ectopic pancreatic tissue.

The intraluminal variety, if large enough, tends to cause obstruction and so present earlier. A smooth round defect may be seen on barium examination which is not associated with disturbance of peristalsis.[9] Ulceration may be present over the dome of the tumour.[8]

We suggest that a distinction might be drawn between superficial ulceration or niche formation and sinus formation or cavitation. As seen over a radiologically benign tumour, superficial ulceration appears to be a relatively non-specific finding and is presumably due to pressure necrosis, from below, of the overlying mucous membrane. Sinus formation or cavitation, on the other hand, usually seems to indicate the presence of a smooth-muscle tumour, which is one of the commonest mesodermal tumours of the gut. The cavity is presumably produced by the discharge of the preformed fluid contents through a necrosed area of mucous membrane overlying the dome of the tumour.

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by Dr. M. Sacks and Dr. H. H. Golby. The photographs of the X-rays were taken by Mr. B. Todt and the microphotograph by Mr. G. McManus.

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LETTER FROM A PSYCHIATRIST TO A YOUNG DOCTOR*

DR. E. E. KRAPF, *Chief, Mental Health Section, WHO*

My dear Nephew and Colleague,

I am happy to hear that you have passed your last exam and my best wishes go out to you. I know you have what it takes to be a good doctor. May God help you to become one.

I address you as 'colleague', but now I wonder whether you consider this quite appropriate. I know that you want to go into general practice and a few remarks I have heard you make in past years lead me to suspect that in your opinion psychiatry does not belong to medicine proper. In fact, I even remember your complaining about a curriculum which obliged you to listen to the 'fancy theories' of the 'head shrinkers' instead of making more time available for learning internal medicine, surgery and obstetrics, or, as you said at the time, 'solid, practical stuff'.

Perhaps I should say right away that the very satisfactory percentage of cures which modern psychiatry manages to obtain is by no means due to the use of magical procedures. We treat our patients in just as scientific a manner as other medical specialists and we are certain enough of our professional status to invent most of the jokes made about us.

But this is not the point I really want to stress. What I feel I should tell you at the beginning of your professional career is that you cannot hope to become a good doctor unless you revise your prejudices against psychiatry. Only if you realize that the psychiatric approach is no less 'solid' and 'practical' than, say, the surgical one will you have the right to call yourself a truly 'general' practitioner. I am indeed quite certain that your whole professional future depends upon your learning to accept me whole-heartedly as your colleague, and this is the reason why—wishing you well as I do—I am writing you this, I am afraid, rather avuncular letter.

You see, the professors in medical schools must teach their pupils an enormous quantity of so-called facts. The other day I read, for instance, that the number of technical terms which a medical student has to learn during his career exceeds 40,000. It is perhaps unavoidable that, as a consequence, the future doctor hears from his teachers rather more about badly functioning organs than about sick persons. But there cannot be any doubt that this purely physiological approach is very far from being realistic, for a patient is by no means only a 'carrier' of diseased organs.

You may want to interrupt me here and protest that you are quite aware of that. Well, I am not saying that you are not. A few years ago you broke your right arm and I remember very distinctly that you had the same difficulty as any other sick person: your doctor very naturally wanted you to *get* better, but you were even more interested in *feeling* better. You were lucky enough to be in the hands of a good doctor who knew how important the 'feeling better' could be for the process of 'getting better'. So he gave you something to relieve the pain you felt, but—more important still—he helped you to overcome your worries and insecurities. Do you remember how much you were preoccupied with the possibility of not recovering the full use of your right arm? Do you recall how you reproached yourself for having ridden a bicycle without brakes at top speed? Perhaps you do not; perhaps you have meanwhile repressed it. But allow me to tell you that the first time you were able to sleep properly after your accident was after your doctor had been sitting for ten minutes at your bedside joking with you and thereby removing your anxieties and guilty feelings.

Do I hear your protesting voice again? Are you telling me that you were not thinking at all of your personal experience when you said that you are aware of patients being persons? Quite frankly, I hope that this time my suspicion is unjustified. But even supposing that it is not . . . what does it matter? Any other example you could give me would prove the same and particularly the important role which anxiety plays in retarding recovery—and even in causing disease—would show up again and again.

And now try to be honest with yourself: Are you sure that you can always recognize the anxiety of a patient? Do you know how to proceed in order to bring to the surface a feeling which your patient is quite likely to hide from himself? And have you learnt how to cope with it? Are you technically prepared for treating the emotions of a person who asks for your medical help? I am very much afraid that your candid answer will have to be 'no', and that you will have to admit that you cannot count on anything but your 'common sense' and your '*savoir faire*'.

This is not good enough: Of course, I am not denying that some doctors have a natural talent for 'personal doctoring'. Many of the 'family doctors' of old had it and this was certainly the main reason for their professional efficacy. But times have changed; medicine has become much more complicated and the 'personal touch' nowadays must (and can) be learned, like bacteriology or radiology.

Let me give you an example. A doctor I know had to treat a child who had recurring pyuria. He managed to cure one attack after another, but every 'cure' was followed by a relapse after some time. So, finally, he began to suspect a psychological factor and discovered that the child reacted to certain actions of his mother by psychogenetic constipation which in turn provoked the pyuria attacks. Would the colleague in question have discovered this connexion if he had not learnt that, as a consequence of inappropriate toilet training, many children develop grave anxieties? But this is by no means the end of the story. It is, perhaps, more important to mention that my colleague eventually cured the child. He did not achieve this by pills and enemas, but by psychotherapy, by a *joint* psychotherapy of the frightened child *and* of his aggressive and over-solicitous mother. I ask again: Could he have obtained this fortunate result if he had not acquired some basic training in the technique of psychotherapy?

Mind you, this doctor was not a psychiatrist; he was an ordinary 'GP', and this is perhaps the most significant point in my little story. Of course, I speak as a psychiatrist, but I should like to make it quite clear that in saying all this I am by no means endeavouring to make psychiatric proselytes. As a matter of fact, I am far from believing that there is an urgent need to train more psychiatrists and I am not trying to induce you to reconsider your vocation. What I do believe is that at least a minimum of psychiatric know-how should be in the scientific baggage of any young doctor who is starting his career and that this is perhaps the most important single requirement for his professional success and his personal happiness.

I re-read what I have written and I cannot help wondering whether I have succeeded in convincing you. Have I been able to awaken some echoes of what one or another of your professors must have included or implied in one of his lectures? Have I whetted your appetite for a more systematic study of matters psychiatric? I do not know. But perhaps I have at least managed to convince you that—psychiatrist that I am—I have an unquestionable right to finish this letter by wishing you Good Luck, as,

Your uncle and colleague,

E.E.K.

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REMUNERATION OF DOCTORS UNDER THE MOTOR VEHICLE INSURANCE ACT

1. The responsibility of insurance companies for the direct payment of certain incidental expenses (including medical expenses) incurred by an injured 'third party' is governed by Section 12 of the Motor Vehicle Insurance Act, 1942, as amended, which, prior to its last amendment late in 1959, read as follows:

'If the cost of the accommodation of any person in a hospital or nursing home, or of any treatment of or service rendered or goods supplied to any person is included in any compensation for which a registered company is liable under section eleven, the company shall, unless that cost has already been paid, pay that cost direct to the person who is entitled to payment therefor and the said person shall be entitled to recover that cost from the company without any cession of action.'

2. This section of the Act (Section 12) provides that if the cost of the accommodation of any person in a hospital or nursing home, or of any treatment of or service rendered or goods supplied to any person is included in any compensation for which a registered company is liable, the company must, unless that cost has already been paid, pay that cost direct to the person who is entitled to payment therefor and such person is entitled to recover that cost from the company without any cession of action.

3. The words 'the person who is entitled to payment therefor' refer to the person in the position of, for example, a doctor, nurse, proprietor of a nursing-home or chemist (who, for convenience, may be termed 'the supplier'), to whom the injured person is indebted for the cost of medical treatment, nursing, nursing-home accommodation or medicines respectively. Normally at common law the injured person sues for his damages *in toto*, and includes in his claim these medical and other 'incidental' expenses for which he is liable. The legislature has provided that such expenses shall be paid by the company direct to the 'supplier' but only if such expenses are included in the compensation for which the company is liable under Section 11. 'Liable under Section 11' means liable to compensate a person who has suffered loss or damage as a result of bodily injury to himself or the death of or bodily injury to any person. The 'supplier' is not a person who has suffered such 'loss or damage'; he is merely 'entitled' by his contract with the injured person to payment by the latter for the treatment, services, etc.

4. The words 'and the said person shall be entitled to recover that cost from the company without any cession of action' contained in Section 12 clearly give the 'supplier' the right to recover the incidental expenses direct from the insurer without any cession of action.

5. There are, however, 3 requirements that must be satisfied before the 'supplier' can recover the incidental expenses direct from the insurer:

(i) The cost of the incidental expenses must be 'included in any compensation for which a registered company is liable'.

(ii) It must be shown that the insurer 'is liable under Section 11' for compensation, i.e. there *must be a decision of a court* (at the instance of the injured party or, if he does not sue, at the instance of the doctor) or *an admission* by the insurer that the injury or death was due to the negligence or other unlawful act of the driver or of the owner or his servant.

(iii) The 'supplier' must not already have been paid by the third party or by anyone else.

6. There is, of course, nothing to debar the third party from incorporating the cost of these incidental expenses in his own claim against the insurer and this is usually done. If he does so, however, and the court gives judgment in his favour, then the insurer must pay such cost direct to the 'supplier' unless such 'supplier' has already been paid.

7. If the third party accepts a compromise payment from the insurer without actually taking the insurer to court, it does not affect the "supplier's" right to recover his full fees direct from the insurer, provided the 3 requirements mentioned in paragraph 5 are complied with. It should here be remembered that a doctor, by virtue of his contract with his patient, always has the right to recover his fee direct from the patient regardless of whether or not an insurance company eventually pays the claim.

8. The main difficulty experienced in connection with the working of the Motor Vehicle Insurance Act, which was framed for the protection of an injured third party, has always been that a decision of a court is essential to determine liability and that in the majority of cases the injured third party is usually not in a financially strong enough position to be able to institute legal proceedings.

The insurance companies themselves, however, in order to avoid as far as possible the expenses involved in litigation, frequently offer the injured third party an *ex gratia* payment without admitting liability and this practice is supported by the Minister, who has always regarded the Act as a sort of social security measure.

9. It is usually this action of the insurer in effecting a compromise (*ex gratia*) payment to the third party, usually without the knowledge of the 'supplier' and without admitting liability or being taken to court, that has led to dissatisfaction amongst 'suppliers' in general and doctors in particular; because, when the 'supplier' ultimately gets to hear about the *ex gratia* payment and attempts to recover his fee from the third party, this party often claims that medical expenses were not included in the payment. Although the 'supplier' as stated in paragraph 7, is still entitled to independently sue the insurer for his fee, he is loath to do so because of the legal expenses involved, and also because of the uncertainty of the success of his action. It must here also be remembered that the third party, having accepted the *ex gratia* payment from the insurer, is naturally very reluctant or even completely unwilling to cooperate and, without the cooperation of this key witness in his case, the chances of the doctor's legal action being successful are, of course, very limited.

10. The Association has, for some years, made representations to the Department of Transport in respect of the dissatisfaction existing amongst doctors because of the non-payment of their fees by insurance companies when making *ex gratia* payments to injured third parties. The Association submitted that if it was competent for an insurer to be held responsible for the direct payment of a doctor's fees when there was a decision of the court establishing the liability of the insurer (see paragraph 5) it should also be obligatory for the insurer, on behalf of the injured third party, to pay directly to the doctor these fees when making an *ex gratia* payment without admitting liability. The Association further submitted that Section 12 of the Act should be amended so as to provide for the protection of the interests of all persons, who either rendered a service or supplied goods to an injured third party.

11. The representations made by the Association, although sympathetically received, could not be *entirely* agreed to for various reasons which were eventually accepted by Federal Council as being reasonable as well as valid.

The representations were, however, partially successful in that the Minister, with the prior approval of Federal Council, agreed to amend Section 12 of the Act so as to make it compulsory for the insurance companies, when making *ex gratia* payments, to pay the accounts of 'suppliers' direct, but limiting their liability in respect of all these accounts to £100.

12. The new Section 12 of the Act, which came into operation on 1 December 1959 reads as follows:

'*Section 12:*

1. Where—

(*a*) the compensation for which a registered company is liable under section *eleven* includes the amount of any costs incurred in respect of the accommodation of any person in a hospital or nursing home or of any treatment of or service rendered or goods supplied to any person; or

(*b*) a registered company has agreed to make any payment in settlement of a claim for compensation under that section, and the compensation claimed could, if the company were liable for the payment thereof, have included such costs, the registered company shall, subject to the provisions of sub-section (2) and (3), pay any amount which may be due in respect of such costs direct to the person to whom that amount is due, and that person shall be entitled to recover such costs from the company without any cession of action: Provided that the total amount payable in respect of such costs under the circumstances described in paragraph (*b*) shall not in any case exceed one hundred pounds.

'2. A registered company shall not be liable for the payment under the circumstances described in paragraph (*b*) of sub-section (1) of any amount alleged to be due in respect of costs referred to in that sub-section unless a claim for the payment thereof is lodged with the company within thirty days after the date on which it has in the manner prescribed by regulation given notice

that it has agreed to make any payment contemplated in that paragraph in settlement of the claim for compensation in which such costs could, if the company were liable for the payment of such compensation, have been included.

'3. If claims whereof the amounts are not in dispute and exceed in the aggregate the sum of one hundred pounds, are lodged with a registered company under sub-section (2) by two or more persons, the company shall pay to each claimant an amount which bears the same ratio to the sum of one hundred pounds as the amount of his claim bears to the amount representing the aggregate of the amounts of all such claims.'

13. It is stressed that the liability of insurance companies for the direct payment of accounts of all 'suppliers' is limited to £100 only when these companies make *ex gratia* payments. Where the company either admits liability or is declared to be liable by a decision of a court, it is liable for the direct payment of the accounts of 'suppliers' *in full*.

14. The regulations subsequently framed under the Act make it compulsory for insurance companies who intend making an *ex gratia* payment to publish such intention in the *Government Gazette*. Medical practitioners are therefore advised to watch the *Government Gazette* in the future as it will be seen from sub-section (2) of Section 12 of the Act (see paragraph 12) that all 'suppliers' (including doctors) must lodge their claims with the company within 30 days after the date of publication.

COMMISSION OF ENQUIRY INTO IONIZING RADIATION

It is hereby notified for general information that His Excellency, the Governor-General, has appointed a Commission of Enquiry consisting as follows:

Chairman: Sarel Francois Oosthuizen: President of the South African Medical and Dental Council and Professor of Radiology, University of Pretoria.

Members: Philippus Johannes Kloppers: Specialist Physician and former Professor of Internal Medicine, University of Pretoria.

Eduard Muntingh Hamman: Dean of the Faculty of Law, University of Pretoria.

Maurice Weinbren: Radiologist, Johannesburg.

Secretary/Member: Pieter Daniël Hartzer: Medical Physicist, Atomic Energy Board, Pretoria.

with the following terms of reference:

To investigate and report upon (1) the danger to the health of persons exposed to X-rays or any other ionizing rays which are as yet not controlled by legislation and the uses and misuses of such radiation; (2) the quantity of radiation to which individuals in various capacities are exposed; (3) the attendant health and other hazards to which patients, staff and general public are exposed; (4) the various permissible doses of radiation; and (5) any related matter which may be deemed necessary by the Commission;

And to make recommendations (i) on whether the use of all types of X-rays should be subjected to statutory control, taking into consideration existing legislation for the control of radio-active isotopes; (ii) regarding legislation which may be deemed necessary by the Commission in this respect; (iii) regarding the possible training of persons in the use of and protection against X-rays; and (iv) regarding research which may be considered necessary in this field.

Interested persons, institutions and organizations, who desire to make representations or to give evidence to the Commission should communicate, in writing, with the Secretary, Commission of Enquiry into Ionizing Radiation, Room 411, Merino Buildings, Pretorius Street, Pretoria.

P. D. Hartzer
Secretary for the Commission

15 February 1960

PASSING EVENTS : IN DIE VERBYGAAN

Disseminated Sclerosis. A South African research worker is anxious to trace all the known cases of disseminated sclerosis in this country. In order to facilitate this survey all doctors who know of patients with this disease are requested to inform the Editor, *South African Medical Journal*, P.O. Box 643, Cape Town. The information so obtained will be passed on to the investigator conducting the survey and he will then contact the informant and ask for details about the patient.

* * *

University of Cape Town and Association of Surgeons of South Africa (M.A.S.A.) Joint Lectures. The next lecture in this series will be held on Wednesday 2 March at 5.30 p.m. in the E-floor Lecture Theatre, Groote Schuur Hospital, Observatory, Cape. Mr. S. Wass, of Guy's Hospital, London, will lecture. All members of the Medical Association are welcome.

* * *

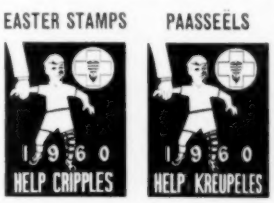
Research Forum, University of Cape Town. A meeting of Research Forum will be held on Wednesday 2 March in the Bennie de Wet Lecture Theatre, A-floor, Groote Schuur Hospital, Observatory, Cape, at 12 noon. Dr. H. B. W. Greig, of Johannesburg, will speak on 'Studies on fibrinolysis'. All interested are invited to attend.

* * *

University of Natal, Medical Students' Council. A Conference on 'Some problems of the newborn' will be held at the Medical School, Umbilo Road, Durban, on 3 - 5 May 1960 between 8.15 p.m. and 10.30 p.m. in the evenings. Further information may be obtained from Dr. V. K. G. Pillay, Graduate Chairman, Conference Committee, Medical Students' Council, University of Natal, 719 Umbilo Road, Durban.

* * *

Easter Stamp Fund. The National Council for the Care of Cripples in South Africa is again organizing the sale of Easter stamps. The proceeds of this annual effort enable the National Council and its 9 Cripple Care Associations throughout the Union and South West Africa to continue their work among cripples. They are striving to maintain and expand existing voluntary 'cripple-care' services. Practitioners engaged in the preventive, curative and rehabilitative fields of cripple care recognize that the work of these voluntary organizations is an essential part of the national campaign to prevent crippling. The important work of the associations can only be continued if they receive adequate financial support from the public.



The Council's sole source of income is derived from its Easter Stamp Fund. The campaign is launched annually in March, and the stamps will be on sale at most Post Offices and schools and outside large business houses from 1 March for a short time.

PHARMACEUTICAL NEWS : FARMASEUTIESE NUUS

DEVELOPMENT IN THE TREATMENT OF INOPERABLE LUNG CANCER

A preliminary communication[1] published in *The Lancet* of 23 January 1960 on 'Tretamine in the treatment of inoperable lung cancer', should create a great deal of interest in Southern Africa.

'During the period July to November, 1959, 43 patients with advanced inoperable lung cancer have been treated with tretamine. . . . After some experiment a pattern of dosage that has given very encouraging results has been worked out. 30 patients have shown subjective improvement and in 10 of these very marked to complete regression of the tumour has occurred.

'In 4 cases the chest X-ray has returned to normal or near normal and it is these 4 results that have stimulated this preliminary report. . . .

'Treatment of these 4 cases consisted of one or two large doses of tretamine given intravenously, with a total dose of 15 to 30 mg.

. . . Within three days subjective improvement was evident, and chest X-ray done routinely on the fifth day showed evident shrinkage of the tumour mass. This shrinkage continued over the next three weeks and at the end of a month the chest X-ray had returned to normal.'

The fact that some success has apparently been achieved by the method is, of course, a vitally interesting development. However, the number of patients treated was comparatively limited and there has not yet been time for any long-term follow-up procedure. Also, it cannot yet be overlooked that 3 of the patients died a short time after the treatment due to haemorrhage from the tumour which had undergone necrosis, and it may well be that a number of doctors will hesitate to use tretamine in view of these deaths, although some may take the view that since these patients would almost certainly have died soon if the treatment had not been used, the risk was a justifiable one.

The first use of tretamine in the control of clinical malignancy followed its release for research purposes by Imperial Chemical Industries Ltd., as a result of observations on the inhibitory action of this and related compounds on the growth of experimental tumours. Other clinical reports followed independent parallel discoveries made at the Sloan-Kettering Research Institute, New York.

Initial supplies of tretamine in 20 mg. ampoules are being flown to South Africa and should be available in a few weeks time. Further information may be obtained from I.C.I. South Africa (Pharmaceuticals) Ltd., P.O. Box 11270, Johannesburg.

1. Jack, G. D., Doyle, L. and Palejwalla, M. M. (1960): Lancet, 1, 206.

SKF LABORATORIES NEW FACTORY

Building has commenced of a new factory, laboratories and offices for SKF Laboratories (Pty.) Ltd. in Isando Road, Isando, Transvaal. These are scheduled for occupation in June 1960 and the company will then transfer its entire organization from Port Elizabeth, thus severing a link which the company has had with the 'Friendly City' since the early 1900's.

The Managing Director, Mr. W. E. Lloyd, said that in addition to providing future expansion potential, the transfer to the Witwatersrand would increase the efficiency of the company's operations and improve the distribution and service to the medical profession and trade within the Union, South West Africa and the Central African Federation.

Construction of this new SKF building in Isando is part of the world-wide expansion of the Philadelphia company's interests, which include the recently occupied £1-million pharmaceutical research and development laboratories, factory and offices at Welwyn Garden City, Hertfordshire, England, and projected new facilities in Sydney, Australia, to be built at an approximate cost of £400,000.

BOOK REVIEWS : BOEKBESPREKINGS

PHYSIOLOGY OF CONSCIOUSNESS

Physiologie des Bewusstseins in entwicklungsgeschichtlicher Betrachtung. Von Prof. Dr. U. Ebbecke. xii + 211 Seiten. Ganzleinen DM 27.00. Stuttgart: Georg Thieme Verlag. 1959.

In this book the author has tried to indicate the development of the nervous control of the organism, from simple reflexes to the most complicated cerebral associations which influence the emotions and behaviour. In short outlines he describes the phylogenetic development of the nervous system. He mentions primitive reactions like the reaction of polyps after mechanical irritation. In the latter part of the book human spinal reflexes are dealt with. Eventually Ebbecke, who is an experienced physiologist, explains sense-organ and higher cerebral functions, cerebral associations, interrelations between different parts of the brain, and consciousness of limbs and of the whole of the body; even the development of speech is mentioned. These few remarks are enough to indicate the vast field that is covered by Ebbecke's book and show that it is too vast for one author. The word 'consciousness' has many different definitions so that the author should have defined what he means by this word. Sometimes there is no difference made between 'Gefühl' (feeling) and 'Empfindung' (sensation). But these are minor faults. On the whole it is a very interesting book which unfortunately is written in rather difficult German. H.W.W.

MEDICINE

The Year Book of Medicine 1958-59. Edited by Paul B. Beeson, M.D., Carl Muschenheim, M.D., William B. Castle, M.D., Tinsley R. Harrison, M. D., Franz J. Ingelfinger, M.D. and Philip K. Bondy, M.D. Pp. 782. 123 figures. $7.50. Chicago: Year Book Publishers, Inc. 1958.

The Year Book Series has been established for many years and needs no introduction, and indeed no recommendation. It is enough to say that the original high standard of the Year Book of Medicine has been well maintained throughout the years, and in this edition it has in no way fallen back. It would be unfair, even impossible, to single out one section as being better than the rest. The papers received are carefully chosen and the summaries well written. The editorial comments at the foot of many are often particularly valuable and to the point. Most of the papers chosen are from American journals, but the English literature generally is fairly well represented, while at least 2 papers from South African journals are included.

In these days when medical literature has reached such alarming proportions that no man can hope to keep abreast of it, it is a real consolation to know that in this relatively small volume most of the best publications are covered. It is difficult to suggest a better way of keeping up with the yearly march of medicine. The book is a must for the busy doctor. H.M.

GENERAL SURGERY

The Year Book of General Surgery 1958-59. Edited by Michael E. de Bakey, B.S., M.D., M.S. With a Section on *Anesthesia*, edited by Stuart C. Cullen, M.D. Pp. 588. 149 figures. $7.50. Chicago: Year Book Publishers, Inc. 1958.

Once again the Year Book of General Surgery reflects the changing interests of the current years. One of the largest sections is that on the aorta and peripheral arteries, a field that until a few years ago had been almost entirely left to the attention of physicians. The good results that can be obtained by removal of localized patches of atheroma—and many cases show extreme localization of the pathological process—are stressed and reported.

The appendix, firm stand-by of three or four decades ago, is represented by a single article only—*cheu fugaces*!

No practising general surgeon can afford to be without a current copy of the 'Year Book'. It is as good as an educational tour of Europe and the States. T.S.

PLASTIC SURGERY

The Year Book of Orthopedics and Traumatic Surgery 1958-59. Edited by Edward L. Compere, M.D., F.A.C.S., F.I.C.S. Section on *Plastic Surgery*. Edited by Neal Owens, M.D., F.A.C.S., F.I.C.S. Pp. 445. 227 figures. $7·50. Chicago: Year Book Publishers, Inc. 1959.

With the advances that are steadily being made in orthopaedic surgery, different facets of the subject become high-lighted, while old problems are filed as solved.

This year the emphasis is on Trauma—about 20% of the abstracted literature is devoted to the treatment and difficulties of fractures and dislocations.

The problem of low back ache which was at one stage, considered by many to have been solved now reappears in this form: 'What can be expected today of operations for intervertebral-disc disease? They cannot be expected to return the patients' back to normal, if by 'normal' is meant complete unawareness of the back in any and all activities'. There is no doubt that excision of an intervertebral disc that is pressing on a nerve root will relieve the sciatica, but what of the subsequent back ache? Should routine spinal fusion be done? Despite the long series of results the problem has not been satisfactorily resolved and the tendency now appears to be towards greater conservatism. Backache as a cause of absenteeism in modern industry, is probably one of the largest single contributory factors.

Serious concern is being felt at the number of cases that are becoming infected after elective operations and it has evolved the challenging statement that 'organized negligence is the cause of most hospital infections'. Every surgeon and operating unit must examine their aseptic technique.

The present annual follows the same high standard as its predecessors. A.S.

PHYSICAL DIAGNOSIS

Physical Diagnosis. The history and examination of the patient. By J. H. Prior, M.D. and Jack S. Silberstein, M.D. and contributors. Pp. 388. 193 illustrations. South African price: 102s. St. Louis: C. V. Mosby Company. 1959.

Essentially this is a book for the medical student. Written by a team of experts of the Ohio State University College of Medicine, it seeks to stress the fundamental importance of the taking of a good and complete history and the making of a thorough and satisfactory examination.

The text is well illustrated with good photographs and such line drawings as are necessary.

There is little doubt that the student who develops the art of taking an organized, logical history, and carrying out a systematic examination as visualized in this work, will find himself greatly assisted during his clinical years of study and, indeed, throughout his life of practice. A.H.T.

PAEDIATRICS

The Year Book of Pediatrics 1958-59. Edited by Sydney S. Gellis, M.D. Pp. 496. 125 figures. $7.50. Chicago: Year Book Publishers, Inc. 1958.

The 1958/59 Year Book of Pediatrics maintains its usual high standard under the continued editorial control of Dr. Sydney S. Gellis.

The abstracts are arranged under the 17 sections used in the previous editions; they cover a wide range of world literature not entirely restricted to American publications.

The editorial comments on the abstracts and the invited comments of experts in their respective fields are continued in this edition and undoubtedly add to its value.

The book is well indexed and well illustrated, and maintains its usual form. The increasing emphasis being paid to neonatal paediatrics is illustrated by the fact that this edition devotes a 55-page section to the premature and newborn in contrast to the 35 pages devoted to this field in the previous year's edition.

This current edition of the Year Book is again recommended reading for all concerned with child health. I.K.

SQUINT

Worth and Chavasse's Squint. The Binocular Reflexes and the Treatment of Strabismus. 9th edition. By T. K. Lyle, *C.B.E.*, M.A., M.D., M.Chir. (Cantab.), M.R.C.P. (Lond.), F.R.C.S. (Eng.) and G. J. O. Bridgeman, M.C., M.A., M.B., B.Chir. (Cantab.), F.R.C.S. (Eng.). Pp. viii + 392. Illustrated. 52s. 6d. London: Baillière, Tindall and Cox Ltd. 1959.

The ninth edition of this established favourite has now appeared, with Bridgeman joining Keith Lyle as joint author. The book has however been so completely rewritten and rearranged as to be almost a new one and has gained in clarity and conciseness.

Strabismus has always been a difficult subject, made more so by the absence of unanimity in definitions and classification, and the articles in the current journals do little to simplify matters. It is therefore timely to have this book, where the problems are clearly defined and fully and logically discussed. Representative case histories are fully illustrated and explained. Considerable additional material has been added, and the book abounds in Chavasse's epigrams and sound advice. The necessity is stressed for urgent treatment of the squinting child as early as possible. This book remains the standard work on squint and as such is unhesitatingly recommended. L.S.

'OFFICE GYNECOLOGY'

Office Gynecology. 7th edition, revised and enlarged, By J. P. Greenhill, B.S., M.D., F.A.C.S., F.I.C.S. (Hon.). Pp. 572. 145 figures. $9.00. Chicago: Year Book Publishers, Inc. 1959.

This little book was originally published in 1939 and has been through 6 editions and 2 reprints, which testify to its usefulness to practitioners engaged in gynaecology.

It covers a wide field in gynaecology and the mode of approach will help the isolated practitioner forced to rely on his own resources. In this the author has succeeded admirably. The text is supplemented with a large number of well-chosen and clear drawings.

Office Gynecology should serve a useful purpose in many a doctor's room in the platteland. G.C.A. vdW.

DIE INFEKTIONSKRANKHEITEN DES MENSCHEN UND IHRE ERREGER

Die Infektionskrankheiten des Menschen und ihre Erreger. In zwei Bänden. Herausgegeben von Prof. Dr. A. Grumbach und Prof. Dr. W. Kikuth. xxxii + 1,702 Seiten. 56 Abbildungen. Ganzleinen DM 198.00. Stuttgart: Georg Thieme Verlag. 1958.

These two volumes cover 1,702 pages of small print, which is enough to indicate how much was demanded of the authors in compiling this tremendous work. They deal with various antigens—whether bacteria, rickettsiae or viruses—and their counteraction by body defence. All possible forms of organisms are scrutinized and described in the minutest detail as regards their morphology, classification, history, method of diagnosis, treatment and prognosis.

In each case the clinical picture accompanies this description, together with a practical approach. This combination of clinical experience and theory makes the book very pleasant reading. An interesting feature is the authors' views on drug resistance, especially in dealing with the notorious strain of *Staph. aureus*. Their solution to the problem gives one the impression that they are clinicians of vast experience and practical approach. D.J.H.

ETRUSCAN ORIGINS

A Ciba Foundation Symposium on Medical Biology and Etruscan Origins. Edited by G. E. W. Wolstenholme, *O.B.E.*, M.A., M.B., B.Ch. and Cecilia M. O'Connor, B.Sc. Pp. xii + 255. 60 illustrations. 45s. net. London: J. & A. Churchill Ltd. 1959.

At the Ciba Foundation's 50th symposium there were brought together experts in widely differing fields of humanities and science—archeologists, anthropologists, classicists, historians, geneticists and biochemists. They came together to discuss the recent contributions of medical biology to ethnology, with special reference to the Etruscans, a people of whose origin nothing certain is known. In the 8th century B.C. they were a powerful nation in north-west Italy. They worked in metal, exploited the minerals of Sardinia and Corsica, and carried on an extensive trade. They also exercised a powerful influence on Roman culture.

The book is primarily concerned with the origin of the Etruscan people and not their achievements. Evidence employed in trying to solve this problem has so far come from ancient literature, linguistics, and archeological material. Now at this symposium medical science has made its own contribution to the study of this intriguing problem, and it is in this contribution by geneticists and blood-group experts that medical readers will find their main interest in this book. E.M.S.

CANCER OF THROAT AND GULLET

Cancer of the Pharynx, Larynx and Oesophagus and its Surgical Treatment. By Ronald W. Raven, *O.B.E.* (Mil.), T.D., F.R.C.S. Pp. xiv + 292 + (10). 189 figures. 76s. + 1s. 9d. postage. London: Butterworth & Co. (Publishers) Ltd. South African Office: Butterworth & Co. (Africa) Ltd., P.O. Box 792, Durban. 1958.

From such a well-known worker on cancer as the author of this work an outstanding contribution is expected. The expectation is realized.

Mr. Raven has dealt with one of the gloomiest and most difficult aspects of the surgery of malignancy. The areas covered by his book present many apparently hopeless problems. His results show that there is hope even though at times it is but a glimmer. He has capitalized on the fact that 85% of cases of cancer of the head and neck die with the disease still confined above the clavicles.

The planning of the work is excellent, diagrams and illustrations are outstanding, and the text clearly presents all aspects of his thesis. The results of Conley, of the Memorial Hospital, New York, on restricted operations for malignant melanoma of the head and neck make more radical procedures unnecessary. Preliminary high ligation of the internal jugular before dividing it distally appears an unnecessary addition to an already lengthy procedure. These are but minor criticisms.

The problem of cancer of pharynx and oesophagus has not been solved but its management has been so well set out that the book will be the reference work for all interested in that field. A.L.M.

PHARMACOLOGY OF THE NERVOUS SYSTEM

The Effect of Pharmacologic Agents on the Nervous System. Proceedings of the Association for Research in Nervous and Mental Disease. Vol. XXXVII. Editor: F. J. Braceland, M.D. Pp. xi + 488. 124 illustrations. 34 tables. $13.50. Baltimore: The Williams & Wilkins Company. 1959.

The above Association have been responsible for many worthwhile publications and this is among the best of their books. It is not that the material is of uniform excellence; as can be expected, there are many pedestrian chapters and some unrestrained opinions unsupported by valid evidence. Its importance lies in the fact that it is a major contribution to organized knowledge in a rapidly expanding field. Each new pharmaceutical discovery promises more than it delivers and waves of blind enthusiasm result in the wholesale use of one new drug after another; these fads are not prevented by the scepticism of the cautious nor even by the hazards of complications when the drugs are potent. It is the duty of every practitioner who uses a drug to make himself fully aware of its actions and side-effects and to weigh the risks ill-effects against the benefits. In the field of mental and nervous disease this book can be considered a standard reference.

The chapters on antibiotics in infections of the central nervous system, and on anticonvulsants, are both excellent and set a high standard which is not maintained throughout. Most of the book is concerned with the pharmacotherapy of mental illness. Drug therapy in psychiatry is largely empirical, and the effect of the personal and suggestive factor is always important; an interesting contribution on placebos and another on sedatives and hypnotics emphasize this point in a most illuminating way. It is reliably concluded that over-active behaviour and psychomotor excitation are capable of control by drugs, especially the promazine derivatives. Drugs to lift moods of depression are less effective. The psychiatrist and neurologist will find this book invaluable and, having regard to the widespread use of tranquillizers and hypnotics by the general practitioner, he too is urged to read the book carefully.

S.B.

MEDICAL GENETICS

An Introduction to Medical Genetics. 2nd edition. By J. A. Fraser Roberts, M.A., M.D., D.Sc., F.R.C.P. Pp. xii + 263. 107 figures. 35s. London, New York, Toronto: Oxford University Press. 1959.

This second edition preserves the lucidity and exhilarating quality of the first edition, while bringing the content, in an era of rapid development, up to date. Thus the genetics of the blood-group systems and the abnormal haemoglobins have provided a wealth of new examples, and the final chapter on genetic prognosis provides a sound basis for heredity counselling. Basic genetic principles and orientations are presented in masterly balance with clinical examples from diverse fields.

In my opinion, this work is a *sine qua non* for the medical student and practitioner alike, in guiding them aright in the ideology and practical applications of medical genetics.

L.A.H.

CORRESPONDENCE : BRIEWERUBRIEK

GENERAL PRACTITIONERS' FEES

To the Editor: At a special meeting of the Natal Coastal Branch held on Tuesday 9 February 1960, the following Resolution was passed unanimously:

'That the customary general practitioners' fee for private visits in the daytime in this area shall be raised from £1 1s. 0d. to £1 5s. 0d.'

A motion was also passed directing me to request you to publish this information in the *South African Medical Journal.*

D. Martyn
Hon. Secretary

Natal Coastal Branch
Medical Association of South Africa
53 Medical Centre
Field Street, Durban
11 February 1960

INCIDENCE OF DIABETES MELLITUS IN ONE DISTRICT OF BASUTOLAND

To the Editor: The finding of Dr. Politzer *et al.*[1] that the incidence of diabetes mellitus in a rural Basuto population is 0·23% is of great interest.

Our own investigation of the incidence of diabetes among urbanized Johannesburg Africans has yielded a figure of about 1%. The series comprised 2,000 subjects and a full report is in preparation.

This higher incidence suggests that urbanization may be a factor in the development of the disease. In this connection it is of interest that Campbell[2] in Durban has found that in the fat middle-aged Zulu diabetic (who constitutes the commonest type of diabetic seen by him) there was a remarkably constant period of exposure to city life before the disease became manifest.

H. C. Seftel
G. J. Abrams

Baragwanath Hospital
Johannesburg
8 February 1960

1. Transvaal Society of Pathologists (1960): S. Afr. Med. J., 34, 95.
2. Campbell, G. D. (1959): Medical Association of South Africa, 42nd S.A. Medical Congress. (Brochure, p. 159.)

PAIN IN STERNUM AND THORACIC VERTEBRAE

Aan die Redakteur: Puzzled se moeilikheid en *Thabo* se wenke oor die moontlike etiologie daarvan verskaf 'n mens interessante leesstof.[1, 2]

Op grond van die goeie stelling dat die eenvoudigste ook die mees waarskynlike of korrekte uitleg is, doen ek aan die hand dat daardie ‚sindroom' bloot net rumaties van aard is in feitlik al die gevalle. Ons almal het dit in mindere of meerdere mate al by Blank en nie-Blank teëgekom. Elke geval kan feitlik bloot aan ‚fibrositis' van die een of ander onderliggende spier- en seningvlies toegeskryf word. Die nadruk moet op die vliese val, hoewel die dieperliggende spiermassa soms ook aangetas kan wees!

As die pyn prekordiaal is, veroorsaak dit by alle pasiënte diepe kommer, want vir hulle beteken dit eenvoudig hartmoeilikheid. Baie pasiënte word seker ook na bed gestuur met 'n bloot fibrositiese prekordiale pyn oor die linker M. pectoralis, veral as dit geleë is in die tendondeel daarvan, want dan gaan die pyn ook graag af in die arm! Só 'n pyn word dus baie maklik aangesien vir een van kardiale oorsprong.

By gevalle soos deur *Puzzled* beskryf sal dit dus insiggewend wees as sorgvuldige betasting oor die oorspronge èn aanhegting van die M. pectoralis, sowel as oor die hele spier self, uitgevoer word.

Dieselfde behoort gedoen te word aan die rugkant *al is die pasiënt se pyn aan die voorkant van die borskas.* Hierdie punt is belangrik.

Druktere areas langs die borand van die M. trapezius, vanaf die skouergewrig tot by die nek; langs die borand van die skouerblad; in die holte tussen die mediale rand van die scapula en die toppe van die daar teenoorliggende rugwerwels, en rondom die onderhoek van die scapula, is na ondervinding, in die groot meerderheid van gevalle, die oorsaak van die ‚sindroom'. Daar mag natuurlik nou en dan miskien ook ander werklike of vermeende oorsake daarvoor gevind word, hoewel dit uiters selde die geval sal wees. ‚Fibrositiese' aandoenings oor die hele lengte van die ‚rugbiltong' kan nogal ander snaakse ‚sindrome' naboots soos: sistitis, ovaritis, appendisitis, kolitis, proktitis, ens. Die behandeling van al sulke ‚sindrome' is natuurlik nie die gewone nie—maak die focus ‚dood' en daar volg dadelike verligting!

Raad

4 Februarie 1960

1. Briewerubriek (1960): S. Afr. T. Geneesk., 34, 20.
2. *Idem* (1960): *Ibid.*, 34, 100.